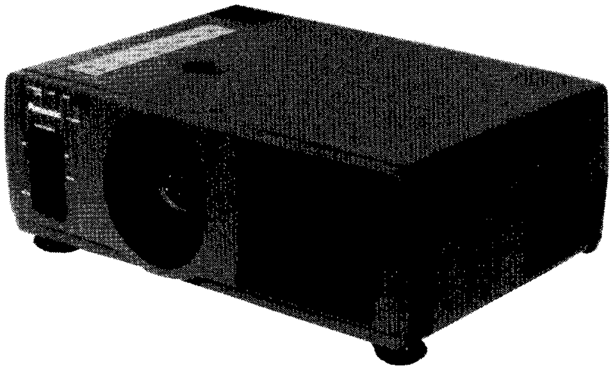
ORDER NO. VED9802251C2

Service Manual

LCD Projector

PT-L595E
PT-L595EG



The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service manual.

Specifications

Power supply:
100−120 V/220−240 V AC, 50/60 Hz
Power consumption:
430 W (During stand by(when fan is stopped):
Approx. 13 W (at 220−240 V)/7 W (at 100−120 V))
Max amps: 2.5 A(at 220−240 V)/4.5 A(at 100−120 V)
LCD panel:
Panel size (diagonal): 33 mm (1.3")
Display method: 3 transparent LCD panels (RGB)
Drive method: Active matrix method
Pixels:
1,440,000
Lens:
F 2.5−3.1
f 48−72
Retractable lens mechanism
Lamp:
Metal halide (280 W)
Luminosity:
700 lm/ANSI (for normal white, 1,016 mm (40-inch screen)
Scanning frequency:
During S-VIDEO/VIDEO signal input
H 15.75/15.63 kHz, V 50/60 Hz
During RGB signal input
Built-in data selection (point scan) method
H 23−69 kHz, V 50−85 Hz
Projection size (diagonal):
762−7,620 mm (30−300 inches)
Throw distance: 1.0−16.2 m (3'3"−53'2")
Optical axis shift: ± 0/10
Screen aspect ratio: 4 : 3
Installation:
Ceiling/Floor · Front/Rear (Menu selection method)
Speaker:
4 cm × 2.85 cm (1$^{9}/_{16}$" × 1$^{1}/_{8}$") ellipse × 2 (stereo)
Max.usable volume output :
2 W(1 W+1 W)(10%THD)

Connection terminals:
RGB IN: Double-line D-SUB HD 15-pin (female)
R.G.B.: 0.7 Vp-p (1.0 Vp-p at G·SYNC signal), 75 Ω
HD/SYNC: 0.6−8.0 Vp-p high impedance, automatic plus/minus polarity compatible
VD: 0.6−8.0 Vp-p high impedance, automatic plus/minus polarity compatible
AUDIO IN:
Double-line 0.5 Vrms M3 jack (Stereo MINI)
S-VIDEO IN:
Single-line, Mini DIN 4-pin
Y 1.0 Vp-p, C 0.286 Vp-p, 75 Ω,
NTSC/PAL/SECAM/NTSC 4.43-compatible
VIDEO IN:
Single-line, RCA pin jack (S-VIDEO priority)
1.0 Vp-p, 75 Ω, NTSC/PAL/
SECAM/NTSC 4.43-compatible
AUDIO IN L-R:
0.5 Vrms RCA pin jack × 2(L-R)
AUDIO OUT terminal:
M3 jack (Stereo MINI) × 1(monitoring output and stereo compatible)
0−2.0 Vrms(variable)
RGB OUT: Single-line D-SUB HD 15-pin (female)
R.G.B.: 0.7 Vp-p (1.0 Vp-p at G·SYNC signal), 75 Ω
HD/SYNC: TTL high impedance
VD: TTL high impedance
SERIAL input connector:
D-SUB 9-pin (male)
For computer - controlled operation
MOUSE input connector:
13-pin round connector
For wireless mouse function (PS/2, Macintosh and serial computer compatible)

Panasonic

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⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Power cord length:
2.5 m (8'2")
Dimensions:
Width: 421 mm (16 $^{9}/_{16}$")
Height: 163 mm (6 $^{13}/_{32}$")
Length: 300 mm (11$^{13}/_{16}$") (not including lens extension length)
Weight: 9.8 kg (21.6 lbs.)
Operating environment:
Temperature: 0−40°C (32 °F−104 °F)
Humidity: 20~80% (not condensation)
Certifications: EN60950, EN55022, EN61000-3-2, EN61000-3-3, EN50082-1

<Remote control unit>
Power supply: 3V DC (two AA-size batteries)
Operation range: 7 m (Approx. 23.0') (When Operated from directly in front of the signal receptor)
Weight: 99 g (Approx. 0.218 lbs.) (with batteries)
Dimensions:
Width: 46 mm (1 $^{13}/_{16}$")
Height: 34 mm (1 $^{11}/_{32}$")
Length: 180 mm (7 $^{3}/_{32}$")

Accessories:
Remote control unit (TNQE003): 1
AA-size batteries: 2
Power cord:
PT-L595E: 1 (TXFSX02VTFZ, 250 V, 10 A)
PT-L595EG: 1 (TXFSX02VTHZ, 250 V, 10 A)
VGA cable (TSXF122): 1 (2.0 m[6'7"], D-SUB HD 15-pin [male] ↔ D-SUB HD 15-pin [male])
Macintosh adapter (TJSF27000): 1 (D-SUB HD 15-pin [female] ↔ D-SUB HD 15-pin [male])
PS/2 mouse cable (TSXF096): 1 (2.0 m[6'7"], 13-pin round [male] ↔ DIN 6-pin [male])
Macintosh mouse cable (TSXF105): 1 (2.0 m[6'7"], 13-pin round [male] ↔ mini DIN 4-pin [male])
Serial mouse cable (TSXF106): 1 (2.0 m[6'7"], 13-pin round [male] ↔ D-SUB 9-pin [male])
Optional Accessories:
CEILING MOUNT BLACKET ET-PK592

◆ Design and specifications are subject to change without notice. Weight and dimensions shown are approximate.

CONTENTS

SPECIFICATIONS .... Cover
SAFETY PRECAUTIONS 3
LOCATION AND FUNCTION OF EACH PART 4
SCREEN REQUIREMENTS 5
STANDARD SETTING-UP POSITIONS 6
ADJUSTING THE LENS 7
SETTING-UP POSITION AND CHANGING THE PROJECTION METHOD 8
SYSTEM CONFIGURATION EXAMPLE 8
WIRELESS MOUSE 9
USING THE SERIAL CONNECTOR 10
CLEANING THE AIR FILTER 11
LAMP UNIT REPLACEMENT PERIOD 12
REPLACING THE LAMP UNIT 12
USING OTHER USEFUL FUNCTIONS 13
DISASSEMBLY INSTRUCTIONS 15
SELF DIAGNOSIS FUNCTION 22
SERVICE MODE FUNCTIONS 23
MEASUREMENTS AND ADJUSTMENTS 24
CIRCUIT BOARDS 41
TERMINAL GUIDE OF ICs AND TRANSISTORs 55
SCHEMATIC DIAGRAMS 59
EXPLODED VIEW 89
REPLACEMENT PARTS LIST 94

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC Plug before disassembling this unit.
3. It is advisable to use an isolation transformer in the AC supply before servicing.
4. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
5. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shield, and isolation R-C combinations etc. are properly installed.
6. After servicing, be sure to restore the wires, leads, insulation barriers, shields, etc.
7. After servicing, make the leakage current checks to prevent the customer from being exposed to shock hazards.

Current Leakage Check

1. Assemble the measuring instrument as shown in Fig.1. Be sure to use the voltmeter equipped with performance described in Table 1.

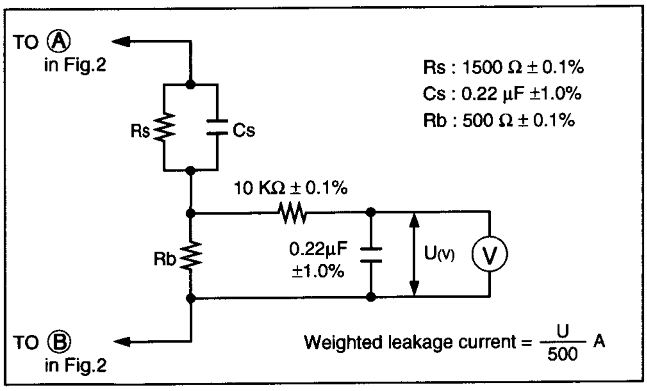


Fig. 1

Table 1

	Performance
Voltmeter (True r.m.s. reading)	Uncertainty: ≤ 2% Input resistance: ≥1MΩ Input capacitance: ≤ 200pF Frequency range: 15Hz to 1MHz

2. Assemble the circuit as shown in Fig 2.Connect AC plug to AC outlet.

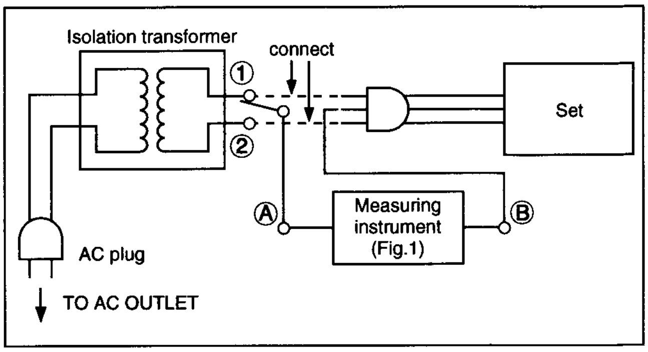


Fig. 2

3. Connect Ⓐ to ① according to Fig.2 and measure voltage.
4. Disconnect Ⓐ from ① to ②. Measure voltage again.
5. Both of the values of voltage obtained from the measurement in step3 and step4 should not be 3.75V nor exceed 3.75V.
   That is to say, both of the values calculated from the formula shown in Fig.1 should not be 0.75mA nor exceed 0.75mA.
   In case a measurement is outside of the limits specified, there is a possibility of shock hazard, and the LCD Projector should be repaired and rechecked before it is returned to the customer.

UV-PRECAUTION AND HIGH PRESSURE LAMP PRECAUTION

1. Be sure to disconnect the AC Plug when replacing the lamp.
2. Since the lamp reaches a very high temperature during its operation, wait until it has completely cooled off when replacing the Lamp Unit.
3. The lamp emits small amounts of UV-Radiation, avoid direct-eye contact.
4. The high pressure lamp involves a risk of explosion. Therefore, do not touch the Lamp Filament when servicing.(See Fig. 3)

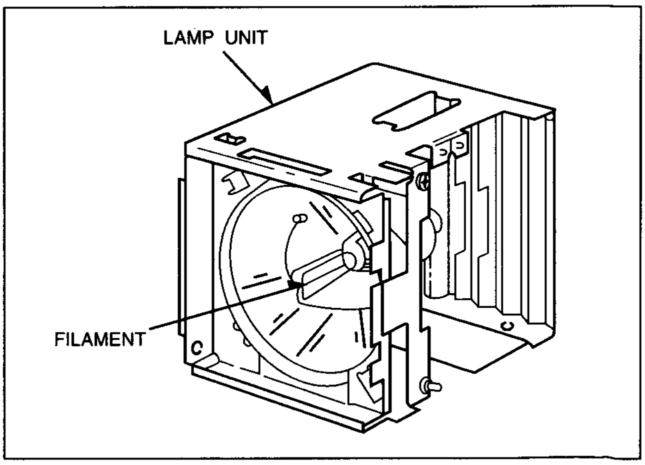


Fig. 3

Location and function of each part

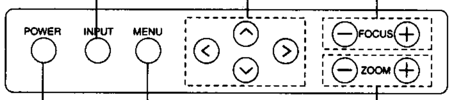
Projector

<Top and front>

INPUT select button
This button is used to select the input signal source.

Arrow buttons (Up: ∧, Down: ∨, Left: <, Right: >)
These buttons are used to select items from the menu screen and for changing setting values.

FOCUS adjustment +/- buttons
These buttons are used to adjust the picture focus.



POWER button
This button is used to turn projection of the picture on and off.

MENU button
This button is used to turn display of the menu screen on and off and to return display to the previous screen.

ZOOM adjustment +/- buttons
These buttons are used to adjust the picture size.

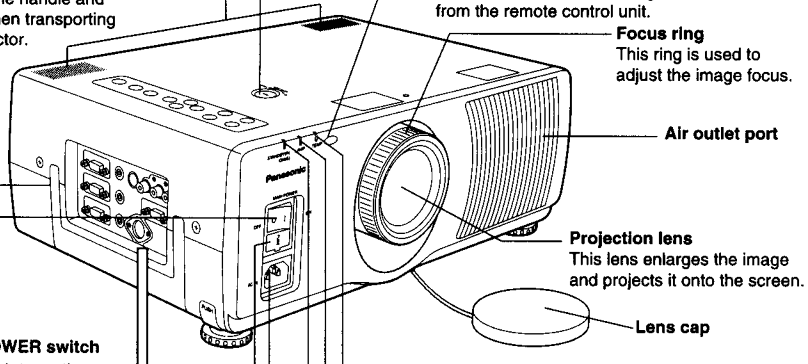
Built-in speakers
These are built-in speakers which are capable of outputting stereo sound.

Carrying handle
Pull out the handle and hold it when transporting the projector.

LENS SHIFT dial
Turning this dial moves the lens up and down. Use it to make fine adjustments to the lens position when setting up the projector.

Remote control signal receptor
This receives the infrared signal transmissions from the remote control unit.

Focus ring
This ring is used to adjust the image focus.



Air outlet port

Projection lens
This lens enlarges the image and projects it onto the screen.

Lens cap

MAIN POWER switch
This switch turns the power supply to the projector on and off.

Fuse holder

Power input socket (AC IN)
The power cord which is supplied with the projector is connected here.

TEMP indicator
This indicator illuminates or flashes as a warning if the temperature inside the projector reaches an abnormal level.

LAMP indicator
This indicator illuminates when the useful life of the lamp is coming to an end, and it flashes when there is a problem with the lamp unit.

Power indicator (STAND BY (R)/ON (G))
This indicator illuminates red when the projector is in standby mode, green when the projector is on, and orange when in standby mode and the cooling fan is operating.

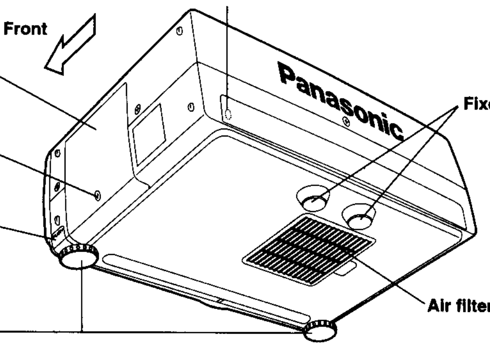
<Back, bottom and right view>

Remote control signal receptor
This receives the infrared signal transmissions from the remote control unit.

Lamp unit cover
Remove this cover to get access to the lamp unit.

Fixing screw for the lamp unit cover
Remove this screw when replacing the lamp unit.

Adjuster button
This button is used to unlock the adjustable legs.



Fixed legs

Air filter

Adjustable legs (two)
These legs can be used to adjust the angle of inclination of the projector.

<Side terminal board>

AUDIO OUT terminal
This terminal is used to output audio signals which are input from the AUDIO IN terminal for RGB input or the AUDIO IN (L-R) terminals for S-VIDEO/VIDEO input. The sound output is automatically switched when the audio input source is switched.

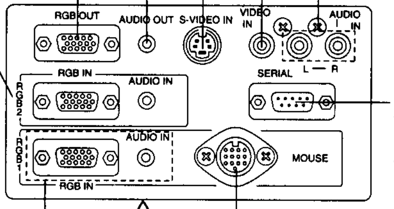
RGB OUT terminal
This terminal is used to output the RGB signal which is connected to the RGB 1 or RGB 2 input connector.

RGB 2 (RGB IN/AUDIO IN) connector/terminal
This connector and terminal are used to input RGB signals and the audio signal which accompany them.

S-VIDEO IN terminal
This terminal is used to input S-VIDEO signals.

VIDEO IN terminal
This terminal is used to input composite video signals.

AUDIO IN (L-R) terminals for S-VIDEO/VIDEO input
These terminals are used to input audio signals which correspond to the signals input to the VIDEO IN or S-VIDEO IN terminal.



SERIAL connector
This connector is used to connect a personal computer to the projector in order to externally control the projector.

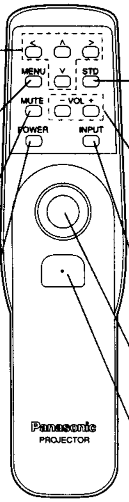
RGB 1 (RGB IN/AUDIO IN) connector /terminal
This connector and terminal are used to input RGB signals and the audio signal which accompany them.

MOUSE connector
This connector is used to connect an accessory or separate mouse cable. This lets you operate a personal computer using the pointer button and click buttons on the remote control unit instead of using a mouse.

Location and function of each part

Remote control unit

<Front view>



Arrow buttons (Up: ∧, Down: ∨, Left: <, Right: >)
These buttons are used to select items from the menu screen and for changing setting values.

MENU button
This button is used to turn display of the menu screen on and off and to return display to the previous screen.

MUTE button
This button is used to temporarily turn off the sound. If you wish to change a setting, this button can also be used to turn off the picture together with the sound.

POWER button
This button is used to turn projection of the picture on and off.

Standard (STD) button
This button is used to reset the picture adjustment values to the factory pre-settings.

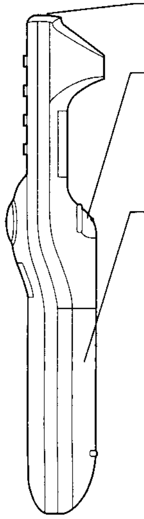
Volume adjustment buttons (VOL +/-)
These buttons are used to adjust the volume of the sound from the built-in speaker and the output level from the AUDIO OUT terminal.

INPUT select button
This button is used to select the input signal source.

Pointer button
This can be used instead of a mouse pointing device to move the screen cursor.

Click 2 button
This button corresponds to the right button on a standard mouse with two buttons.

<Side view>



Transmitter
The infrared signals are transmitted from here.

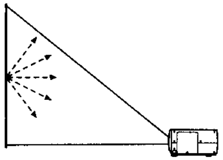
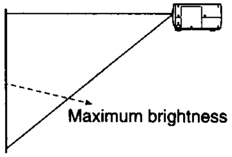
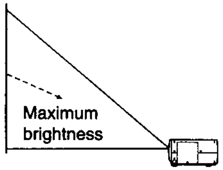
Click 1 button
This button corresponds to the button on a single-button mouse, or to the left button on a standard mouse with two buttons.

Battery compartment cover

Screen requirements

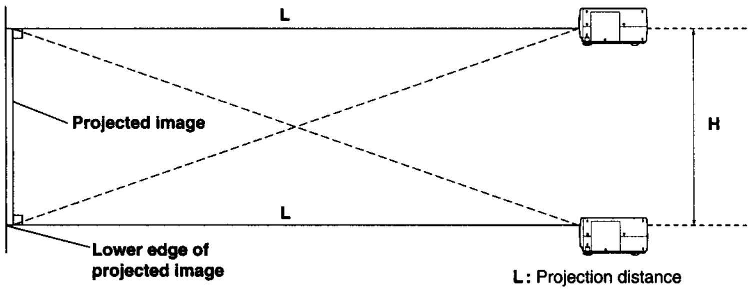
This projector is used to project the image onto flat screens. However, the brightness and viewable range will vary depending on which type of screen is used.
When selecting a screen, check the characteristics of the screen to ensure that it is suitable for the intended place of use.

Screen characteristics (reference)

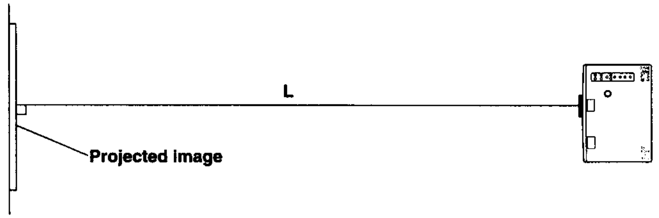
	Screen type	Screen characteristics
Reflective screens	**White screen**	This type of screen can be seen from anywhere, so there are no limits on the viewing position. However, the surrounding walls should be darkened as in a movie theater, otherwise a clear picture cannot be obtained. 
	Silver screen	This type of screen gives a picture which is 2–4 times brighter than a white screen. A variety of types are available from different manufacturers, and each type has different brightness characteristics. Some also have restrictions on the possible range of viewing positions. ※ Care should be taken with screens that have a high gain, as these types of screen can cause colour distortion at the left and right edges. ※ This type of screen is recommended when the projector is suspended from the ceiling. 
	Beaded screen	This type of screen is similar to the silver screen, except that no colour distortion occurs at the left and right edges. Moreover, most of the light is reflected at the same angle as the angle of incidence. ※ This type of screen is recommended when the projector is placed on the floor. 
Translucent screens	**Flexible translucent screen**	This type of screen is made of PVC (polyvinyl chloride). It has the same characteristics as silver screens, but sometimes it can have hot spots.
	Rigid-type translucent screen	This type of screen is made of acrylic plastic. It is extremely durable and has excellent optical characteristics. It performs in the same way as silver screens.

Standard setting-up positions

After determining the appropriate position for the projector by referring to the illustrations and standard setting-up dimensions given below, set up the projector. The distance **L** from the projector to the screen and the height **H** do not vary, regardless of whether the projector is being used in the floor, ceiling, front or rear positions.



L: Projection distance
H: Height from lower edge of projected image to centre of lens



Standard setting-up dimensions

Because the projector uses a × 1.5 electronic zoom lens, it is possible to adjust the projection distance. And because there is also a function provided for adjusting the height of the lens, the height of the projector can also be adjusted relative to the position of the screen.

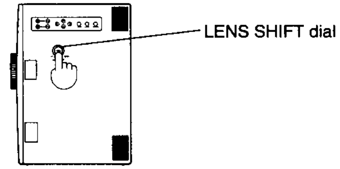
Projection size (diagonal)	Projection distance (L)		Height from lower edge of projected image to centre of lens (H)	Height from upper edge of projected image to centre of lens (H)
	Minimum	Maximum		
0.762 m (30")	1.0 m (3'3")	1.5 m (4'11")	0–0.45 m (0–18")	0– -0.45 m (0– -18")
1.016 m (40")	1.4 m (4'7")	2.0 m (6'6")	0–0.60 m (0–24")	0– -0.60 m (0– -24")
1.524 m (60")	2.1 m (6'10")	3.1 m (10'2")	0–0.91 m (0–36")	0– -0.91 m (0– -36")
2.032 m (80")	2.8 m (9'2")	4.2 m (13'9")	0–1.21 m (0–48")	0– -1.21 m (0– -48")
2.540 m (100")	3.6 m (11'9")	5.3 m (17'4")	0–1.52 m (0–60")	0– -1.52 m (0– -60")
3.810 m (150")	5.4 m (17'8")	8.0 m (26'2")	0–2.28 m (0–90")	0– -2.28 m (0– -90")
5.080 m (200")	7.2 m (23'7")	10.7 m (35'1")	0–3.04 m (0–120")	0– -3.04 m (0– -120")
6.350 m (250")	9.0 m (29'6")	13.4 m (43'11")	0–3.81 m (0–150")	0– -3.81 m (0– -150")
7.620 m (300")	10.8 m (35'5")	16.2 m (53'1")	0–4.57 m (0–180")	0– -4.57 m (0– -180")

NOTE:
- In addition, if the projector is not completely vertical with respect to the screen and horizontal with respect to the floor, distortion of the projected image will result. Adjust the projector horizon by the procedure given on page 7 .
- The values in the table shown above are approximate.

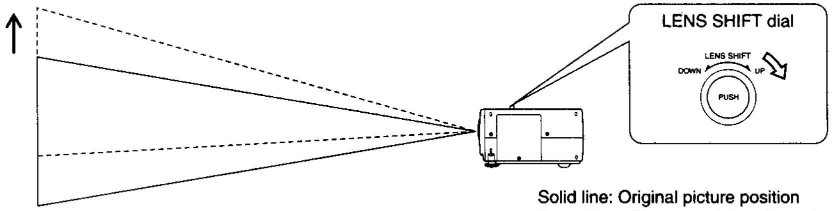
□ Adjusting the position of the projected picture

The vertical position of the projected picture can be adjusted by changing the height of the projection lens using the LENS SHIFT dial which is on top of the projector.
After determining the projection distance and the setting-up position, adjust the vertical position of the projected picture by carrying out the following procedure.

Press the LENS SHIFT dial on top of the projector. ············The dial will pop up and it will be possible to turn it to make adjustments.

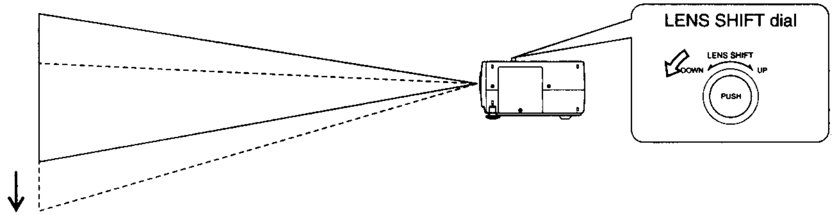


If the LENS SHIFT dial is turned clockwise, the position of the projected image will be raised.

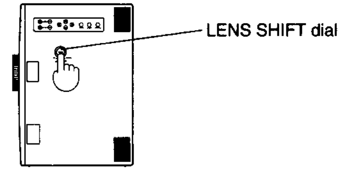


Solid line: Original picture position
Dotted line: Picture position after adjustment

If the LENS SHIFT dial is turned counterclockwise, the position of the projected image will be lowered.



Press the LENS SHIFT dial on top of the projector. ············The dial will pop back in again and adjustment will no longer be possible.



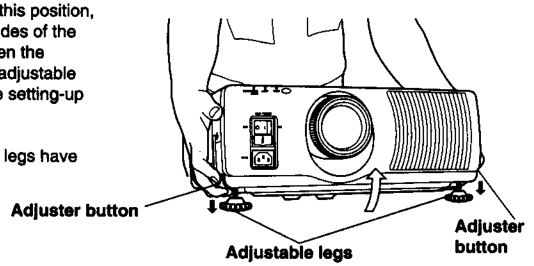
NOTE:
- The height of the projection lens can be adjusted within a range of ±10.1 mm (±$^{25}/_{64}$ inch). However, the adjustment range for the position of the projected picture will vary depending on the size of the projected picture.

☐ Setting the projector up horizontally

If the projector is not set up so that it is horizontal, it will not be possible to obtain a distortion-free picture. If placing the projector on top of a table or similar surface, carry out the following procedure to ensure that no distortion of the picture occurs.

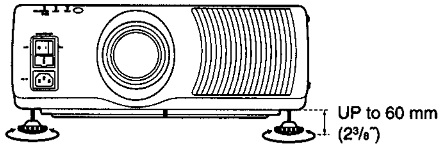
Adjustment procedure

1. Lift the front of the projector until the projector as a whole is horizontal. While holding it in this position, press the adjuster buttons under the sides of the projector (1 each at left and right). When the buttons are pressed, the left and right adjustable legs will drop down until they reach the setting-up surface.
   NOTE:
   - Do not release the buttons until both legs have reached the setting-up surface.



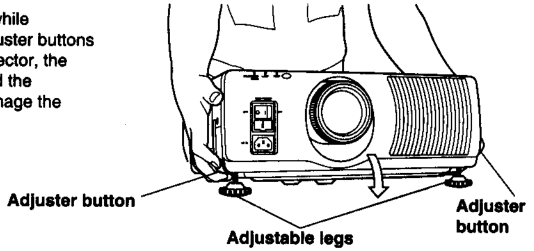
2. Release the adjuster buttons. (The adjustable legs will lock as soon as the buttons are released.)

3. Turn the adjustable legs by hand in either direction to make fine adjustments to the level of the projector so that the projector is perfectly horizontal.
   NOTE:
   - The legs can be extended by up to 60 mm (2³/₈"). If you try to extend them any further than this, they will merely spin freely.



<Retracting the adjustable legs>

After lifting the front of the projector slightly, press and hold the adjuster buttons and then gently lower the projector.
NOTE:
- Be sure to support the projector firmly while pressing the adjuster buttons. If the adjuster buttons are pressed without supporting the projector, the adjustable legs will suddenly unlock and the projector will fall down, which could damage the projector.

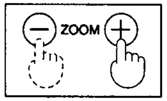


Adjusting the lens

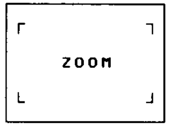
The projector is equipped with electronic zoom and electronic focusing mechanisms, so that you can carry out adjustments simply by pressing the ZOOM (+/-) buttons and the FOCUS (+/-) buttons on the top of the projector, or by following the on-screen adjustment display. Alternatively, you can adjust the focus by turning the lens directly.
NOTE:
- If these buttons are pressed while the on-screen display for some other function is on the screen, the buttons pressed will operate but the on-screen display will not switch to the ZOOM or FOCUS adjustment screen. Thus there may be cases where the operation and the display do not match.

Adjustment procedure <for direct adjustment>

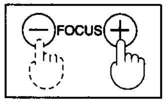
1. Press the ZOOM (+/-) buttons on the operation panel on the top of the projector to adjust the size of the picture.



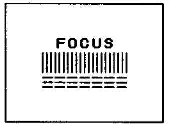
If the "+" button is pressed, the picture becomes larger, and if the "-" button is pressed, the picture becomes smaller.



2. Press the FOCUS (+/-) buttons on the operation panel on the top of the projector to adjust the focus of the picture.



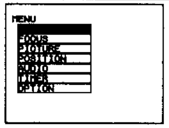
Adjust so that the image projected onto the screen is at the optimum focus.



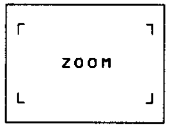
NOTE:
- If approximately five seconds pass without any buttons being pressed, the adjustment screen will be cleared.

Adjustment procedure <adjusting using the on-screen adjustment display>

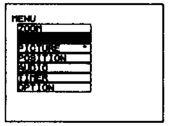
1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "ZOOM".



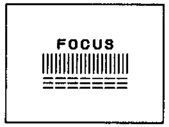
3. Press the "<" and ">" buttons to display the ZOOM adjustment screen.
4. Press the "<" and ">" buttons to adjust the picture size.
   If the "+" button is pressed, the picture will become larger, and if the "-" button is pressed, the picture will become smaller.



5. Press the MENU button, or wait for approximately five seconds without pressing any button. The display will then return to the MENU screen.
6. Press the "∧" and "∨" buttons to select "FOCUS".



7. Press the "<" and ">" buttons to display the FOCUS adjustment screen.
8. Press the "<" and ">" buttons to adjust the picture focus.
   Adjust so that the image projected onto the screen is at the optimum focus.



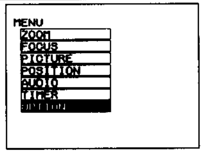
NOTE:
- If approximately five seconds pass without any buttons being pressed, the display will return to the MENU screen.
- The projector is equipped with a lens retracting function which will cause the lens to be retracted automatically when the power is turned off. However, the lens will not then return to the previously adjusted position even if the power is turned back on again. If you do not wish this function to operate, turn the function setting off while referring to "Using the lens retracting function" on page 14.

Setting-up positions and changing the projection method

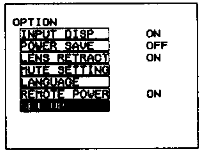
The projection method used by the projector can be changed in accordance with the setting-up position.
At the time of shipment from the factory, the projector is set to the "FRONT" projection method, but this can be changed if required.

Setting procedure

1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "OPTION".

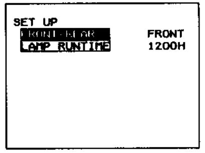

MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
TIMER
OPTION

3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "∧" and "∨" buttons to select "SET UP".


OPTION
INPUT DISP
POWER SAVE
LENS RETRACT
MUTE SETTING
LANGUAGE
REMOTE POWER
SET UP

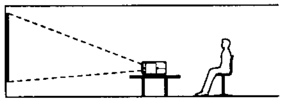
INPUT DISP ON
POWER SAVE OFF
LENS RETRACT ON
REMOTE POWER ON

5. Press the "<" and ">" buttons to display the SET UP screen.
6. Press the "∧" and "∨" buttons to select "FRONT/REAR".
7. Press the "<" and ">" buttons to select "FRONT" or "REAR".

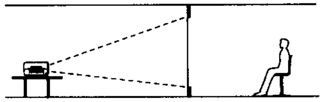

SET UP
FRONT/REAR
LAMP RUNTIME

FRONT/REAR FRONT
LAMP RUNTIME 1200H

FRONT mounting
(Setting condition at the time of shipment from the factory.)



REAR mounting



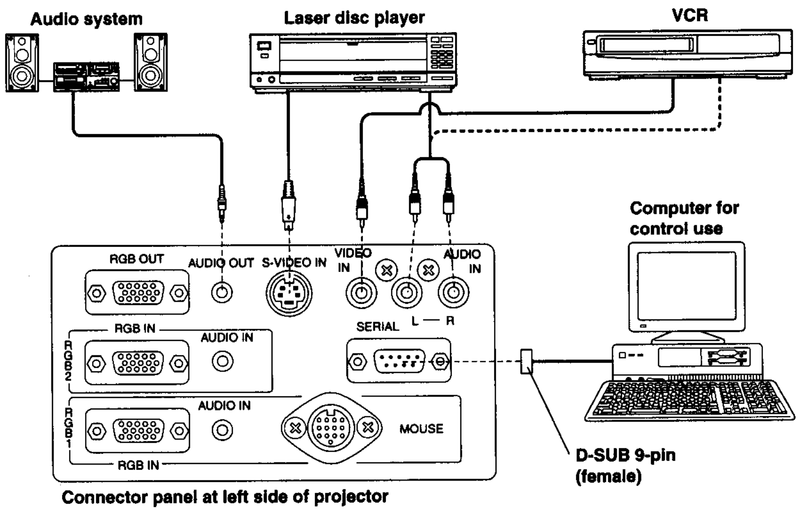
NOTE:
- The adjustment screen and the MENU screen can both be cleared by pressing the MENU button.

System configuration example

Notes on system configuration

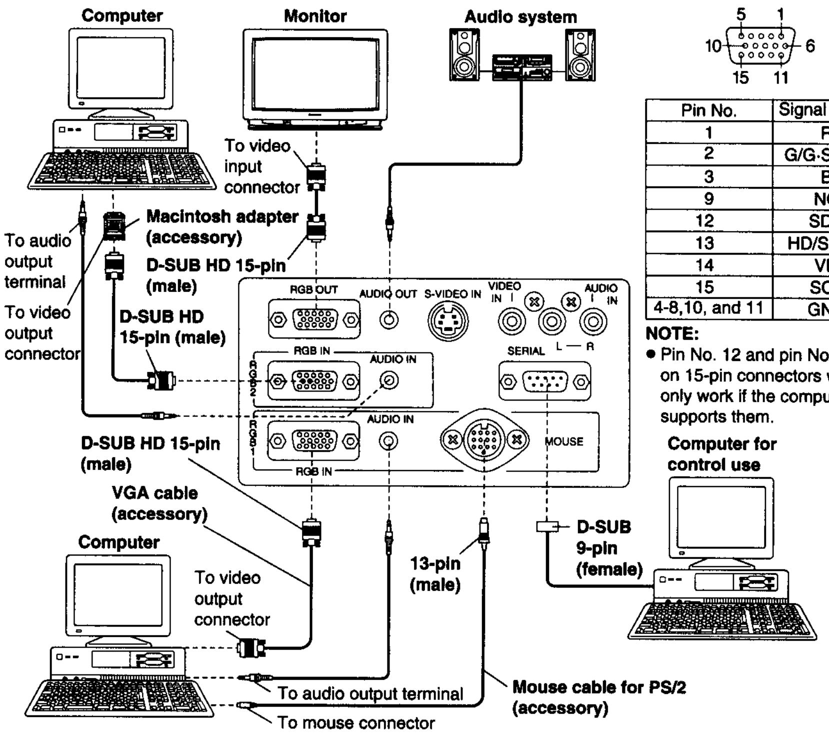
- Turn off the power supply of each system component before connecting any of the components.
- Read the instruction manual for each system component before connecting it.
- If the necessary cables for connecting any system components are not supplied with the component or available as an option, you may need to fashion a cable to suit the component concerned.
- If there is a lot of jitter in the video signal input from the video source, the picture on the screen may flicker. In such cases, it will be necessary to connect a TBC (time base corrector).
- The projector can be connected to video signal sources which out put VIDEO, S-VIDEO and analog RGB signals (0.6–8.0 Vp-p synchronized signals).
- The projector has built-in speakers. However, you will need to connect a separate audio system to the AUDIO OUT terminal if your needs specify high sound volumes. No sound will come out of the projector's built-in speaker while the AUDIO OUT terminal is being used.
- It may not be possible to connect some types of computer.

Example of connection to audio-visual equipment


Audio system
Laser disc player
VCR
Computer for control use
RGB OUT
AUDIO OUT
S-VIDEO IN
VIDEO IN
AUDIO IN
L — R
SERIAL
RGB IN
AUDIO IN
R G B 2
R G B 1
AUDIO IN
MOUSE
RGB IN
D-SUB 9-pin (female)
Connector panel at left side of projector

NOTE:
- If the S-VIDEO IN and VIDEO IN terminals are both connected at the same time, the S-VIDEO IN signal input will have priority. If you wish to view the signal being input to the VIDEO IN terminal, disconnect the plug from the S-VIDEO IN terminal.
- Only one audio signal input system is available for the AUDIO IN (L-R) terminals for S-VIDEO/VIDEO signals, so if you wish to change the audio input source, you will need to remove and insert the appropriate plugs.
- If the video signal source is connected using a cable with a BNC junction plug, use the BNC/RCA adapter to convert the pin jack.
- If an audio system is connected to the AUDIO OUT terminal, the sound volume balance and muting can be controlled by the remote control unit which is supplied with the projector. However, if the volume is set to "0", no audio signal will be output from the AUDIO OUT terminal.

Example of connection to a computer


Computer
Monitor
Audio system
To video input connector
To audio output terminal
To video output connector
Macintosh adapter (accessory)
D-SUB HD 15-pin (male)
D-SUB HD 15-pin (male)
RGB OUT
AUDIO OUT
S-VIDEO IN
VIDEO IN
AUDIO IN
RGB IN
AUDIO IN
SERIAL
L — R
AUDIO IN
MOUSE
RGB IN
D-SUB HD 15-pin (male)
VGA cable (accessory)
Computer
To video output connector
13-pin (male)
D-SUB 9-pin (female)
Computer for control use
To audio output terminal
To mouse connector
Mouse cable for PS/2 (accessory)
5
1
10
6
15
11

- Pin configuration and signal names for RGB connector

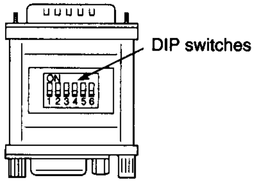
Pin No.	Signal name
1	R
2	G/G·SYNC
3	B
9	NC
12	SDA
13	HD/SYNC
14	VD
15	SCL
4-8,10, and 11	GND

NOTE:
- Pin No. 12 and pin No. 15 on 15-pin connectors will only work if the computer supports them.

NOTE:
- If the mouse connector on the projector is connected to the mouse connector on the computer with the accessory or separate mouse cable, you can then use the remote control unit in place of the computer's mouse. However, this function operates only when input to the RGB 1 connector has been selected.
- If you wish to use the infrared mouse function, turn on the main power to the projector before turning on the personal computer.
- If using a personal computer with a suspend/resume function, the infrared mouse function may not operate until the computer is restarted.
- The signal which is connected to the RGB IN connector for RGB 1 or RGB 2 will be output from the RGB OUT terminal. However, no signal is output from the RGB OUT terminal if the input signal is switched so that RGB 1 and RGB 2 are no longer selected, or if the projector power is turned off.

About the Macintosh adapter

An adapter for use with Macintosh computers is included with this unit. If image signals are to be input to this unit from a Macintosh computer, connect this adapter to the accessory VGA cable at the end which is to be connected to the computer. The resolution of the video signals output from the Macintosh computer can be switched by changing the adapter DIP switch settings.
Set the DIP switches to match the desired resolution according to the table given below.

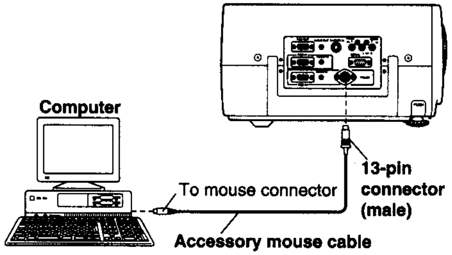

DIP switches
ON
1 2 3 4 5 6

Display mode name/No. of dots	S1	S2	S3	S4	S5	S6
MAC 13 / 640 × 480	ON	OFF	OFF	OFF	ON	ON
MAC 16 / 832 × 624	OFF	ON	OFF	OFF	ON	ON
MAC 19 / 1024 × 768	OFF	OFF	ON	OFF	ON	ON

Wireless mouse

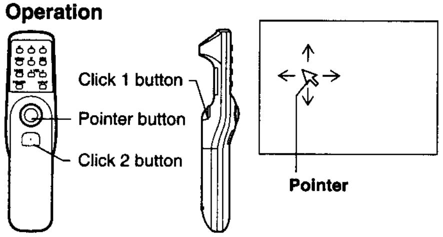
A wireless mouse function is provided. This function lets you use the remote control unit to control a personal computer in place of the personal computer's mouse. This is done by connecting the projector to a personal computer using the mouse cable (2.0 m (6′7″)) which is supplied with the projector.
This projector is compatible with the following types of mouse only. Other types of mouse cannot be used.
- PS/2 mouse
- Macintosh mouse
- Serial mouse

Example of connection


Computer
To mouse connector
13-pin connector (male)
Accessory mouse cable

NOTE:
- Different mouse cables are used for different types of computers. Therefore, do not use any mouse cables other than the supplied mouse cables.
- The wireless mouse function operates only when input to the RGB 1 connector has been selected.

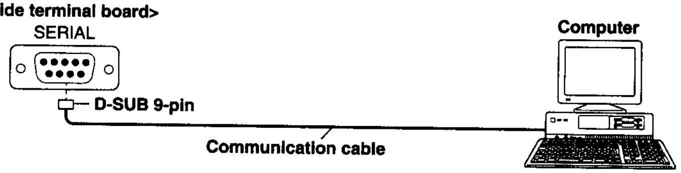
Operation


Click 1 button
Pointer button
Click 2 button
Pointer

- **Pointer button**
  While gently pressing the pointer button with your thumb, push the pointer button back and forward and to the left and right. The pointer (arrow) will move back and forward and to the left and right on the screen.
- **Click 1 button**
  This button corresponds to the button on a single-button mouse, or to the left button on a standard mouse with two buttons.
- **Click 2 button**
  This button corresponds to the right button on a standard mouse with two buttons.

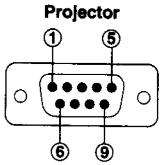
Using the serial connector

The serial connector which is on the side terminal board of the projector conforms to the RS-232C interface specification, so that the projector can be controlled by a personal computer which is connected to this connector.


<Side terminal board>
SERIAL
D-SUB 9-pin
Computer
Communication cable

NOTE:
- Use a proper communication cable which is suitable for the personal computer to connect the serial connector and the personal computer.

Pin layout and signal names for SERIAL connector


Projector
①
⑤
⑥
⑨

D-SUB 9-pin connector (male) seen from the outside

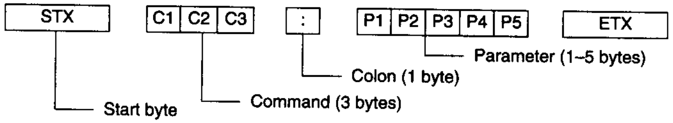
Pin No.	Signal name	Contents
①		NC
②	RXD	Received data
③	TXD	Transmitted data
④		NC
⑤	GND	GND
⑥		NC
⑦	RTS	Connected internally
⑧	CTS	
⑨		NC

Communication settings

Signal level	Determined by the RS-232C interface
Synchronising method	Asynchronous
Baud rate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

Basic format

Each packet which is sent from the computer starts with STX. Following this is the command itself and the parameters for that command (if any), and the packet then ends with ETX. Add parameters when necessary according to the control contents.


STX
C1 C2 C3
:
P1 P2 P3 P4 P5
ETX
Parameter (1~5 bytes)
Colon (1 byte)
Command (3 bytes)
Start byte

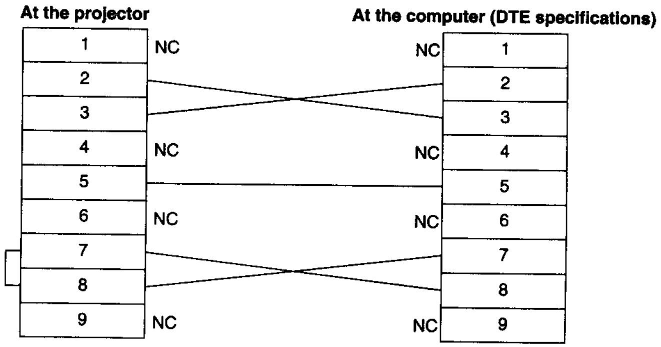
NOTE:
- *If sending multiple commands, check that a response has been received from the projector for one command* before sending the next command.
- If an incorrect command is sent from the personal computer, the "ER401" command will be sent from the projector to the personal computer.

Control commands

The commands which the personal computer can use to control the projector are shown in the following table.

Command	Control Contents	Remarks
PON	Power ON	In standby mode, all commands other than the PON command are ignored.
POF	Power OFF	
AVL	Volume	Parameter 000 = Adjustment value 0 : : 063 = Adjustment value 63
AMT	Mute	Parameter 0 = MUTE OFF 1 = MUTE ON
IIS	Input signal selection	Parameter VID = VIDEO RG1 = RGB1 RG2 = RGB2

Cable specifications


At the projector
At the computer (DTE specifications)
1
2
3
4
5
6
7
8
9
NC
NC
NC
NC
1
2
3
4
5
6
7
8
9
NC
NC
NC
NC

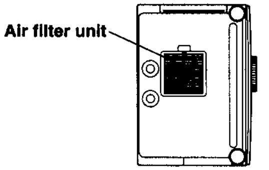
Cleaning the air filter

If the air filter becomes clogged with dust, the internal temperature of the projector will rise, the TEMP indicator will flash and the projector will be switched automatically to standby mode.

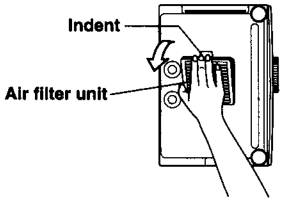
Cleaning procedure

1. **Turn off the main power supply and disconnect the power cord plug from the wall outlet.**
   Turn off the main power supply according to the procedure given in "Turning the power on and off" on page 11 before disconnecting the plug from the wall outlet.

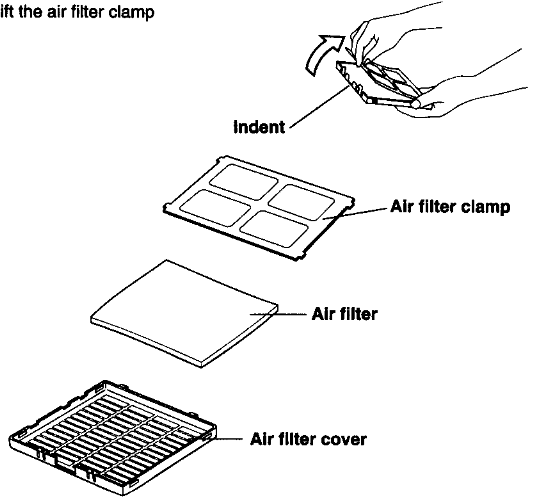
2. **Gently turn the projector upside down.**
   Place the projector on top of a blanket so that it will not become scratched.



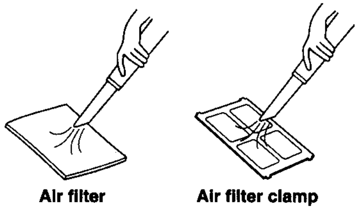
3. **Remove the air filter cover.**
   Hold the indents on the air filter cover with your hands and pull the air filter unit out of the projector.



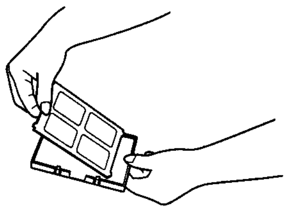
4. **Remove the air filter clamp and then take out the air filter.**
   Insert your finger into the indent in the air filter cover, bend the air filter clamp slightly inwards, and then lift the air filter clamp upwards to remove it.



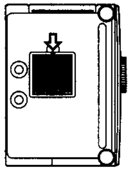
5. **Clean the air filter and the air filter clamps.**
   Use a vacuum cleaner to clean off any accumulated dust.



6. **Install the air filter and the air filter clamp to the air filter cover.**
   Place the air filter inside the air filter cover, and then insert the air filter clamp into its original position as shown in the illustration.



7. **Install the air filter cover.**
   Slide the air filter cover into the projector until the hollows in the air filter cover are aligned with the hollows in the projector.
   NOTE:
   - Be sure to install the air filter cover before using the projector.
     If the projector is used without the air filter cover installed, dust and other foreign particles will be drawn into the projector, and malfunctions will result.

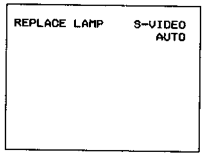


NOTE:
- If the dust cannot be removed by cleaning, it is time to replace the air filter. Please consult your dealer.

Lamp unit replacement period

The lamp used as the light source must be replaced after approximately 1,800 hours of use. If the lamp is not replaced after the cumulative usage time has passed 2,000 hours, the projector will automatically switch to standby mode.

- **Screen display once cumulative usage time exceeds 1,800 hours**
  If you continue to use the lamp unit after 1,800 hours of total usage time have passed, the on-screen display shown at right will appear as a reminder each time the projector is turned on. This display will continue to appear until a button is pressed.



REPLACE LAMP S-VIDEO
AUTO

Replacing the lamp unit

Notes on replacing the lamp unit

- Because the lamp unit in this projector incorporates a metal halide lamp, the temperature inside the lamp rises during use and the lamp becomes very hot. After turning off the MAIN POWER switch and disconnecting the power cord from the wall socket, wait for the lamp to cool down before replacing the lamp unit.
- Take extreme care when handling the removed lamp unit, as it contains gas under high pressure and can easily become damaged if it is struck against hard objects or dropped.
- The old lamp unit may shatter if it is handled roughly after removal.
  Ask an authorised waste disposal agency to dispose of the old lamp unit.
- A Phillips screwdriver is necessary for removing the lamp unit. Make sure that your hands are not slippery when using the screwdriver.

NOTE:
- The projector is not supplied with a replacement lamp unit. Please ask your dealer for details.
  Lamp unit product no.: ET-LA095

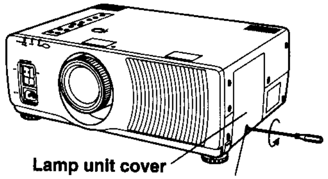
CAUTION: Do not use any lamp unit other than the one with the product number indicated above.

☐Replacement procedure

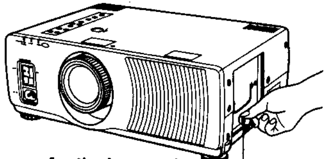
NOTE:
- If the lamp unit is replaced after it has been used for more than 2,000 hours, the projector will switch to standby mode after approximately 10 minutes of operation. Steps 7. to 11. on the following page should thus be completed within 10 minutes.

1. Disconnect the power cord plug from the wall outlet and check that the area around the lamp unit has cooled down.

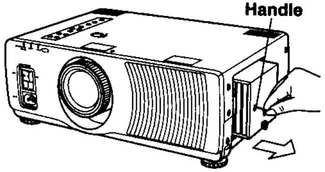
2. Use a Phillips screwdriver to remove the screw which is securing the lamp unit cover at the right side of the projector, and then remove the lamp unit cover.
   NOTE:
   - Read the CAUTION on the lamp unit cover before continuing.



3. Turn the fixing screw for the lamp unit by hand until it turns freely.
   CAUTION:
   - The lamp unit will be hot after it has been used, and you might receive burns if you touch it while it is still hot.

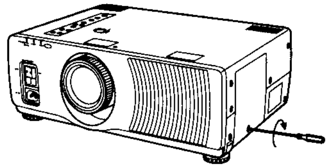


4. Hold the handle which is attached to the lamp unit and gently pull the lamp unit out from the projector.



5. Insert the new lamp unit, while making sure that the direction of insertion is correct, and then turn the fixing screw for the lamp unit by hand until it is securely tightened.
   NOTE:
   - Insert the lamp unit so that the fixing screw for the lamp unit is facing downwards.

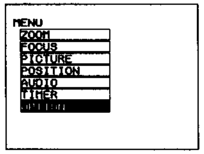
6. Securely install the lamp unit cover, and then use a Phillips screwdriver to securely tighten the fixing screw for the lamp unit cover.
   NOTE:
   - Be sure to install the lamp unit and the lamp unit cover securely. If they are not securely installed, it may cause the protection circuit to operate so that the power cannot be turned on.



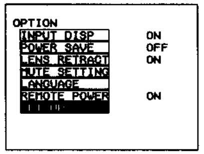
7. Insert the power cord plug into the wall outlet and then press the MAIN POWER switch on the front of the projector to turn on the power.
   NOTE:
   - If the power does not turn on when the MAIN POWER switch is pressed, turn the MAIN POWER switch off again and check that the lamp unit and the lamp unit cover are securely installed. Then turn the MAIN POWER switch back on.

8. Press the POWER button on the projector or remote control unit so that a picture is projected onto the screen.

9. -(1)Press the MENU button to display the MENU screen.
   (2)Press the "∧" and "∨" buttons to select "OPTION".


MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
TIMER

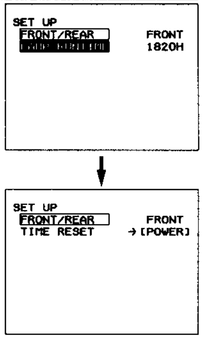
10.-(1)Press the "<" and ">" buttons to display the OPTION screen.
   (2)Press the "∧" and "∨" buttons to select "SET UP".


OPTION
INPUT DISP
POWER SAVE
LENS RETRACT
MUTE SETTING
LANGUAGE
REMOTE POWER
ON
OFF
ON
ON

11.-(1)Press the "<" and ">" buttons to display the SET UP screen.
   (2)Press the "∧" and "∨" buttons to select "LAMP RUNTIME".
   - The cumulative usage time of the current lamp unit will be displayed on the screen.

   (3)Press the ">" button on the projector control panel continuously for three seconds or more. (The "LAMP RUNTIME" display will change to "TIME RESET".)
   NOTE:
   - The ">" button on the remote control unit cannot be used at this time.

   (4)While the SET UP screen (the screen showing "TIME RESET") is being displayed, turn off the power. This will reset the cumulative usage time for the lamp unit.
   NOTE:
   - If any other buttons are pressed while "TIME RESET" is being displayed, the display will return to "LAMP RUNTIME" and the button pressed will take effect.


SET UP
FRONT/REAR
FRONT
1820H
SET UP
FRONT/REAR
TIME RESET
FRONT
→ [POWER]

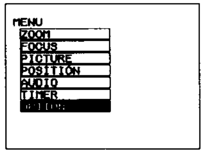
Using other useful functions

□Changing the on-screen display language to another language

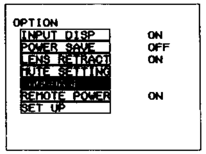
At the time of shipment, the language for on-screen displays is set to English. However, you can change it to some other language by the following procedure.

Setting procedure <For changing the language to German (DEUTSCH)>

1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "OPTION".

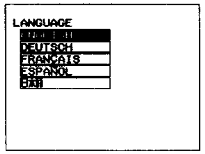

MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
TIMER

3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "∧" and "∨" buttons to select "LANGUAGE".


OPTION
INPUT DISP
POWER SAVE
LENS RETRACT
MUTE SETTING
REMOTE POWER
SET UP
ON
OFF
ON
ON

5. Press the "<" and ">" buttons to display the LANGUAGE screen.
6. Press the "∧" and "∨" buttons to select "DEUTSCH".
   - The setting changes each time the cursor is moved.
   - The languages that can be selected include English (ENGLISH), German (DEUTSCH), French (FRANÇAIS), Spanish (ESPAÑOL) and Japanese (日本語).

NOTE:
- Press the MENU button to clear the setting screen and the MENU screen.

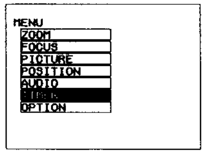

LANGUAGE
DEUTSCH
FRANÇAIS
ESPAÑOL
日本語

□Using the countdown timer

The countdown timer can be used at times such as during breaks in meetings by displaying the amount of time remaining for something on the screen. The countdown time can be set to a maximum of 60 minutes, in units of One minute. The setting procedure is as follows.

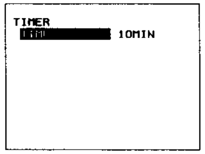
Setting procedure

1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "TIMER".


MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
OPTION

3. Press the "<" and ">" buttons to display the TIMER screen.
4. Continue pressing the "<" and ">" buttons to set the time.
   - The setting can be made in units of one minute up to a maximum of 60 minutes.
   - This function can be disabled by setting the time to "0".
5. Press the MENU button to clear the menu screen. The countdown will then start.

NOTE:
- During the countdown, the screen will switch to the colour specified by the BACK COLOR setting.
- If you would like to cancel the countdown function after it has been activated (if you would like to clear the countdown display), go back to the TIMER screen and set the time to "0" minutes, or press the MENU button.

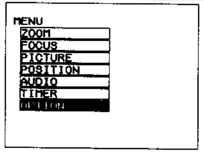

TIMER
10MIN

□Using the power save function

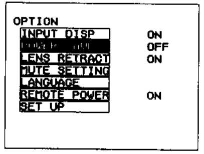
In order to conserve power, the projector is equipped with a power save function which causes it to switch automatically to the standby condition if no signal is input for 10 minutes or more. At the time of shipment from the factory this function is set to "OFF". If you would like to use the function, change the setting to "ON" by the following procedure.

Setting procedure

1. Press the MENU button to display the MENU screen.
2. Press the "^" and "v" buttons to select "OPTION".



3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "^" and "v" buttons to select "POWER SAVE".
5. Press the "<" and ">" buttons to change the setting to "ON".
   - If you change the setting to "OFF", the power save function will be disabled.



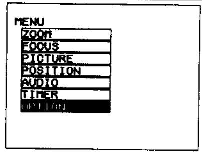
NOTE:
- Press the MENU button to clear the setting screen and the MENU screen.
- If both this function and the lens retracting function described below are set to "ON", the lens will be automatically retracted when the projector switches to standby mode. If this happens, you will need to readjust the zoom and focus of the lens after starting the projector again.

□Using the lens retracting function

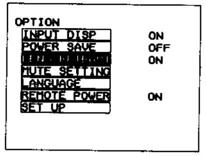
This function causes the projector lens to be retracted automatically when the projector switches to standby mode, and extends the lens again when the projector starts back up again. Having this function set to "ON" is useful if the projector will not be used for an extended period of time, or when the projector is to be transported somewhere. However, once the lens has been retracted, it will be necessary to readjust the zoom and focus of the lens once the projector has been started up again. At the time of shipment from the factory this function is set to "ON".

Setting procedure

1. Press the MENU button to display the MENU screen.
2. Press the "^" and "v" buttons to select "OPTION".



3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "^" and "v" buttons to select "LENS RETRACT".
5. Press the "<" and ">" buttons to change the setting to "ON".
   - If you set this function to "ON", the lens will be extended and retracted each time the power is turned on and off.



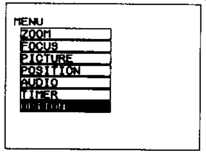
NOTE:
- If this function is set to "OFF", the lens will remain extended at all times.
- Press the MENU button to clear the setting screen and the MENU screen.

□Setting the screen colour when no signal is input and during picture muting

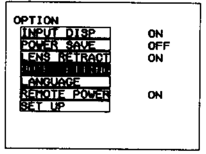
The projector can be set to project either a solid blue image or a solid black image onto the screen if nothing is connected to the projector's input terminals, or if equipment is connected but no signal is being input from it. This setting is also effective when picture muting is active and when the countdown timer is running.
At the time of shipment from the factory, the colour is set to "BLUE".

Setting procedure

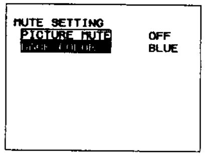
1. Press the MENU button to display the MENU screen.
2. Press the "^" and "v" buttons to select "OPTION".



3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "^" and "v" buttons to select "MUTE SETTING".



5. Press the "<" and ">" buttons to display the MUTE SETTING screen.
6. Press the "^" and "v" buttons to select "BACK COLOR".
7. Press the "<" and ">" buttons to change the setting to "BLUE" or "BLACK".
   - This will set the colour to be projected when no signal is being input.



NOTE:
- If a signal that the projector cannot recognise is input, the projector will consider this to be no signal.
- Press the MENU button to clear the setting screen and the MENU screen.

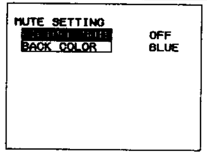
□Using the MUTE remote control unit button to turn off both sound and picture

At the time of shipment from the factory, the MUTE button on the remote control unit is set so that only the sound is muted when the button is pressed. If you would like the picture to be muted along with the sound, set the PICTURE MUTE function to "ON" by the following procedure.

Setting procedure

The procedure below starts from the MUTE SETTING screen.

1. Press the "^" and "v" buttons to select "PICTURE MUTE".
2. Press the "<" and ">" buttons to change the setting to "ON".
   - If the function is set to "ON", the picture will be muted along with the sound when the MUTE button is pressed.
   - If the function is set to "OFF", only the sound will be muted when the MUTE button is pressed. (Factory pre-setting)



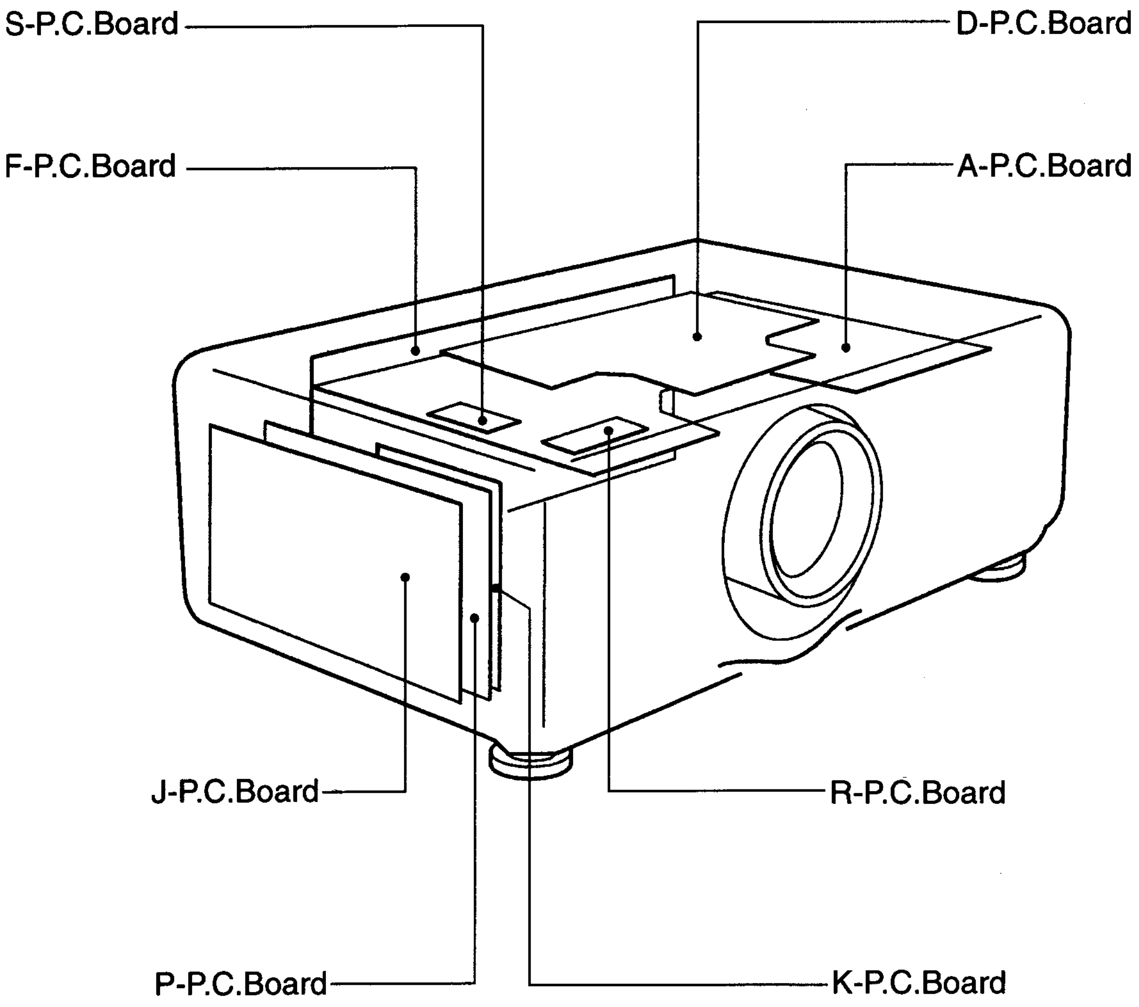
NOTE:
- Press the MENU button to clear the setting screen and the MENU screen.
- When PICTURE MUTE is on, the colour projected will be the same colour as the BACK COLOR setting.

Disassembly Instructions

WARNING:

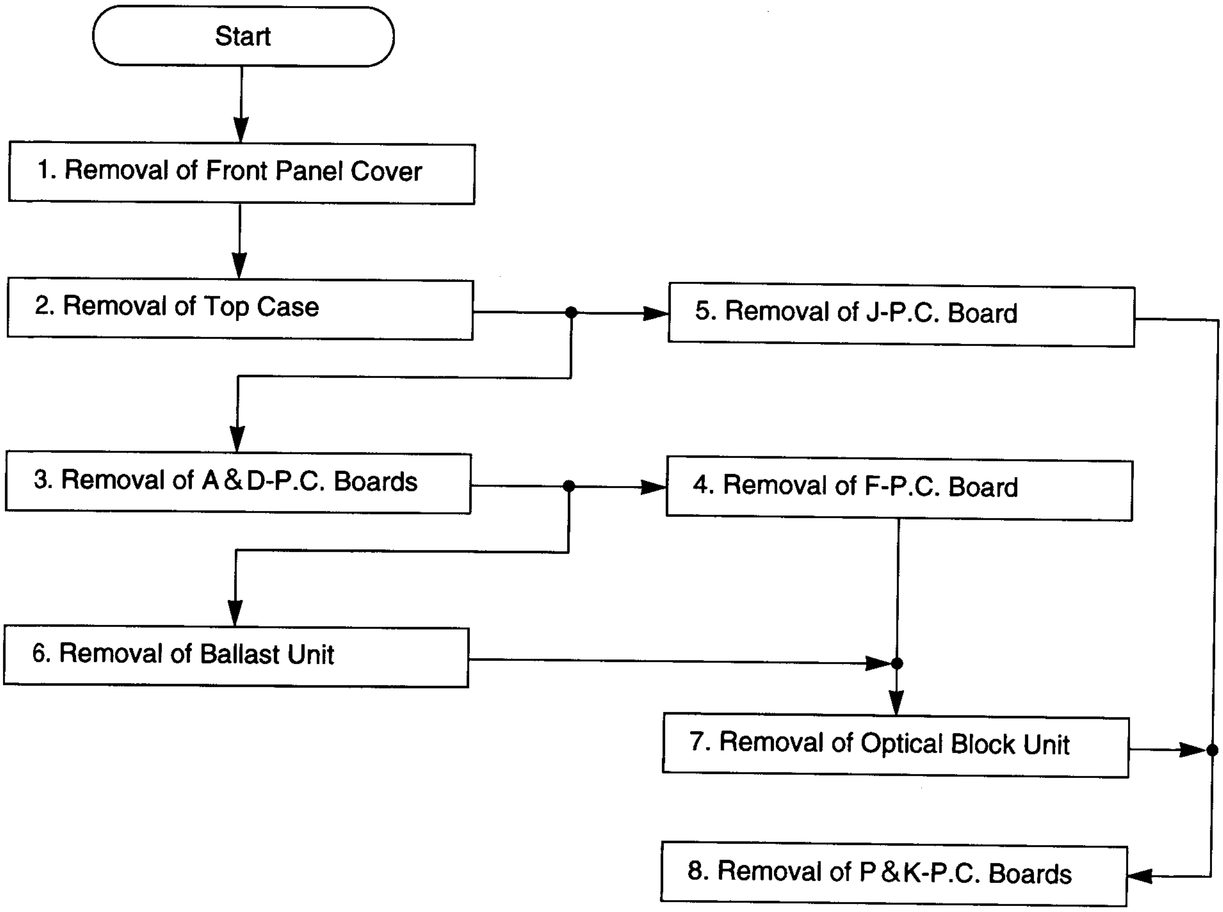
1. Before disassembly, remove the AC plug from the wall outlet.
2. When turning over a P.C. board to adjust it, be sure to lay on insulating material under it in order to prevent shoring.
3. P.C. boards and wires should not be pulled forcibly, but be handled carefully.
4. Printed boards and connector should be handled with care-avoid handling them forcibly!
5. When handling the P-P.C. board and K-P.C. board with the power ON, there is a risk of an Electric shock if you use the COLD side heat sink while working on the HOT side of the chassis.

CIRCUIT BOARD LAYOUT


S-P.C.Board
F-P.C.Board
D-P.C.Board
A-P.C.Board
J-P.C.Board
R-P.C.Board
P-P.C.Board
K-P.C.Board

DISASSEMBLY FLOWCHART

This flowchart indicates disassembly items of the cabinet parts and circuit boards in order to find the items necessary for servicing. When reassembling, perform the steps in the reverse order.


Start
1. Removal of Front Panel Cover
2. Removal of Top Case
5. Removal of J-P.C. Board
3. Removal of A & D-P.C. Boards
4. Removal of F-P.C. Board
6. Removal of Ballast Unit
7. Removal of Optical Block Unit
8. Removal of P & K-P.C. Boards

1. Removal of Front Panel Cover

1. Remove 3 screws (A), and carefully pull out the Front Panel Cover toward you.

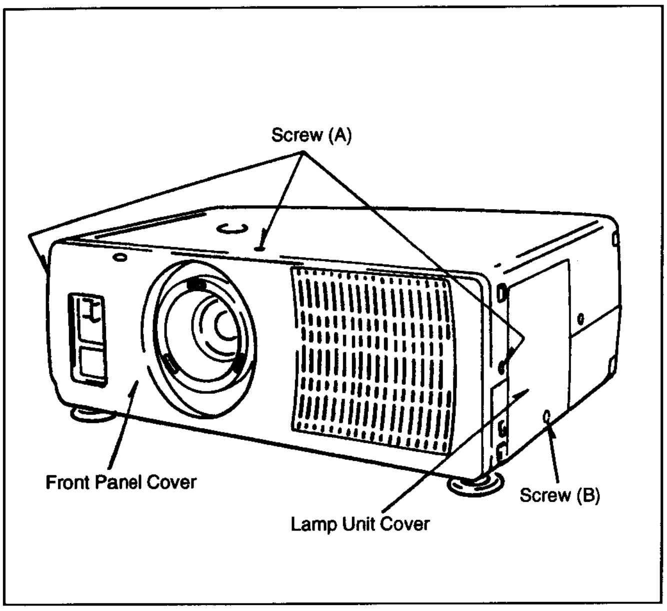

Screw (A)
Front Panel Cover
Lamp Unit Cover
Screw (B)

Fig. 1

2. Remove of Top Case

1. Remove the Front Panel Cover.
2. Loosen a screw (B), and remove the Lamp Unit Cover.
3. Remove 3 screws (C) and 2 screws (D), then disconnect 2 connector (A15 and A 21) on the A-P.C. Board.
4. Remove the Top Case.

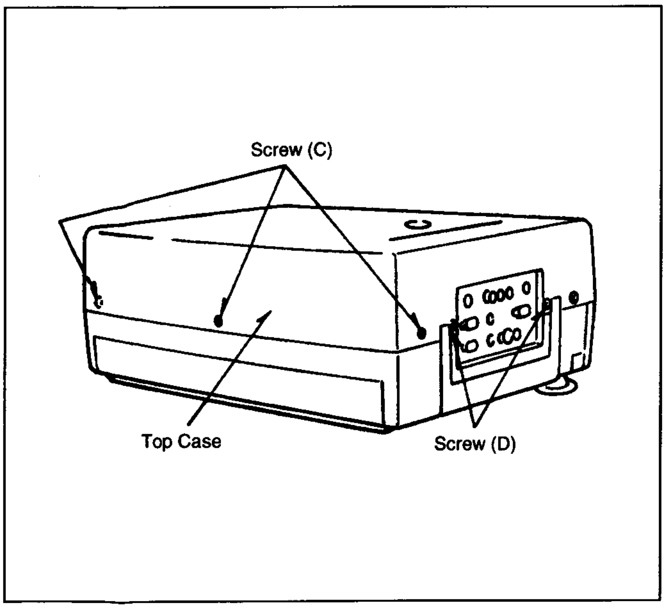

Screw (C)
Top Case
Screw (D)

Fig. 2

NOTE:

(1) Install the Lamp Unit Cover when starting the projector.
(2) The projector starts with the S-P.C. Board removed, but be sure to connect a connector (A15) when checking Speaker and Operation Panel.

3. Removal of A-P.C. Board and D-P.C. Board

1. Remove a screws (E), then remove soldering (F) on two places.
2. Remove the shield cover.
3. Disconnect each connector, remove the D-P.C. Board.

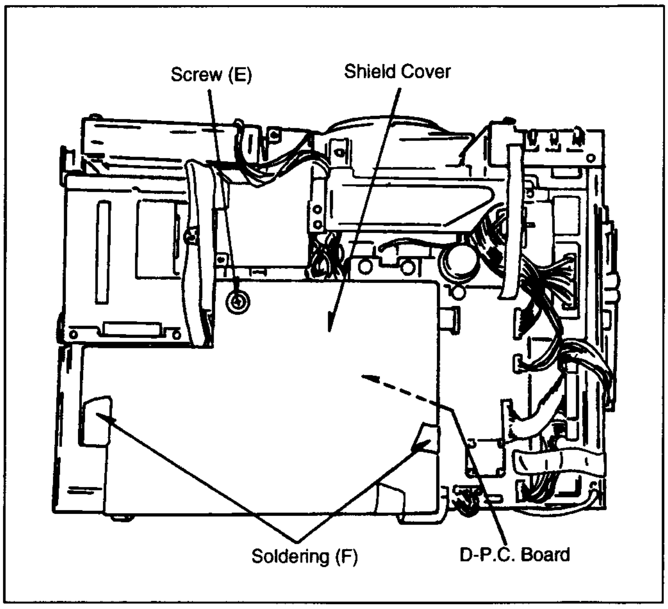

Screw (E)
Shield Cover
Soldering (F)
D-P.C. Board

Fig. 3

4. Remove 5 screws (G).

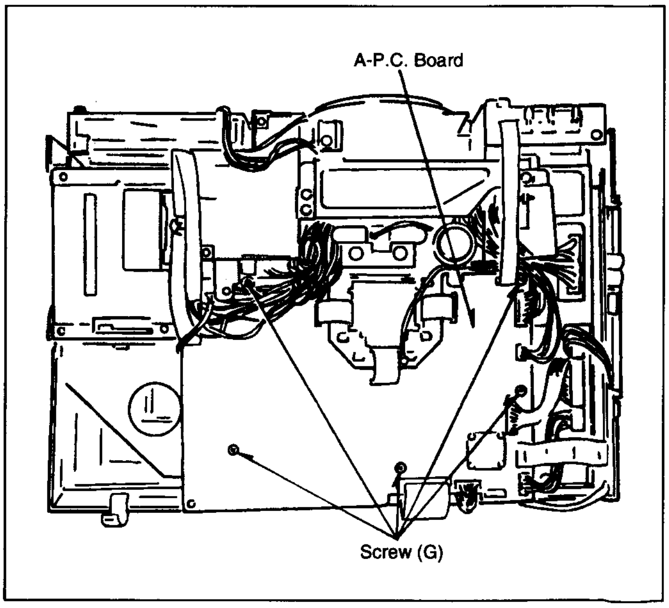

A-P.C. Board
Screw (G)

Fig. 4

5. Disconnect each connector, remove the A-P.C. Board.

4. Removal of F-P.C. Board

1. Remove a screw (H).
2. Disconnect each connector, remove the F-P.C. Board.

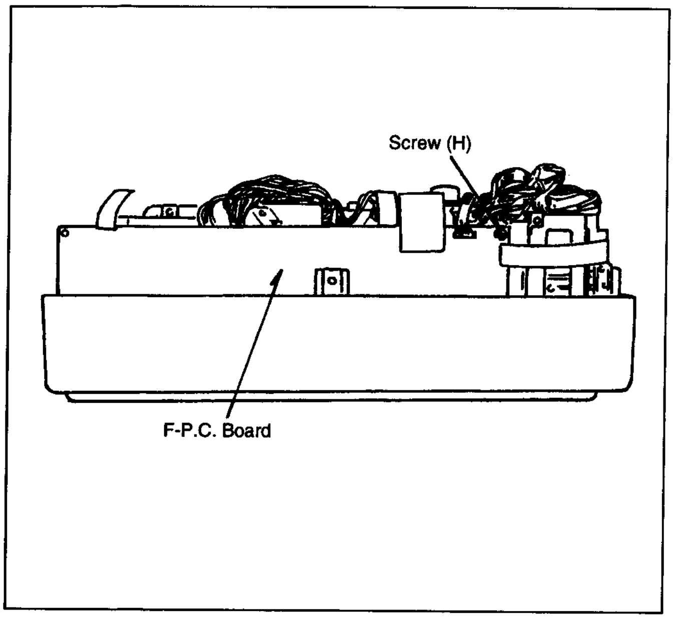

Screw (H)
F-P.C. Board

Fig. 5

Note:

Insert the F-P.C. Board into the slot of the Bottom Case to secure the board.

5. Removal of J-P.C. Board

1. Remove 2 screws (I).
2. Disconnect each connector, remove the J-P.C. Board.

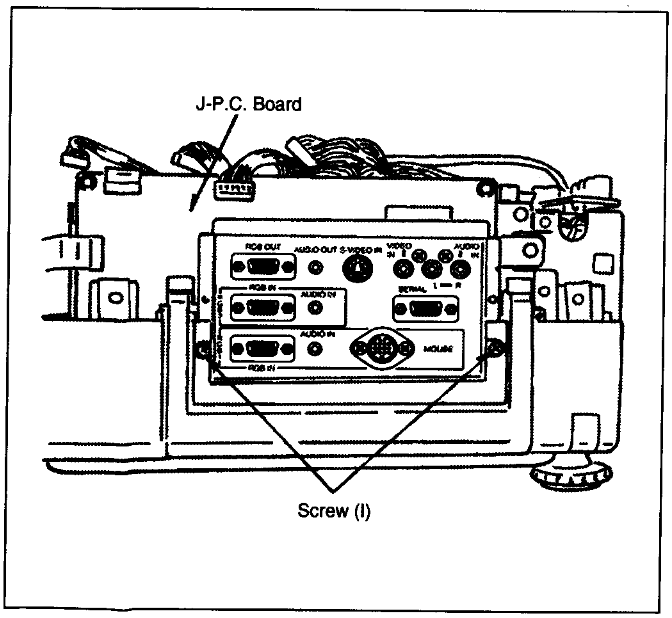

J-P.C. Board
Screw (I)

Fig. 6

6. Removal of Ballast Unit

1. Remove 4 screws (J) , and remove the earth joint Angleiron.
2. Remove 2 screws (K), and remove the cooling duct.
3. Disconnect 2 connector on the Bimetal.

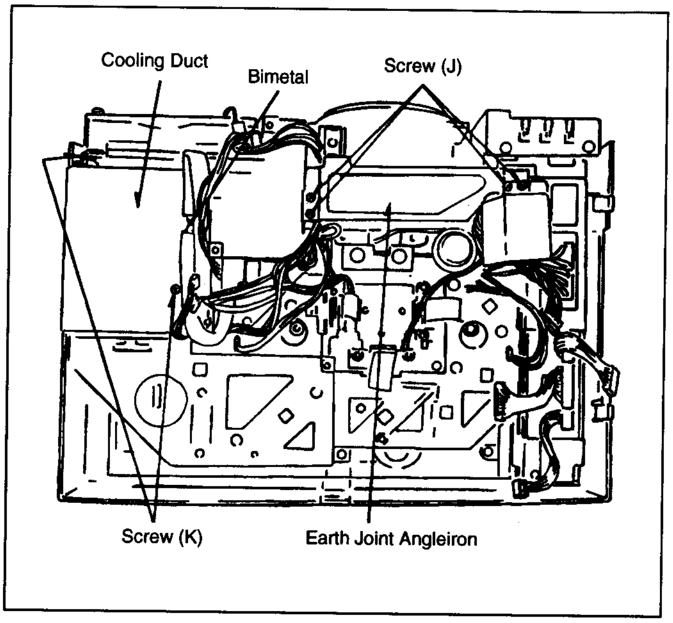

Cooling Duct
Bimetal
Screw (J)
Screw (K)
Earth Joint Angleiron

Fig. 7

4. Remove 2 screws (L), and remove the lamp socket.
5. Remove 3 screws (M).
6. Disconnect each connector on the Ballast Unit, and carefully pull out the Ballast Unit toward upper.

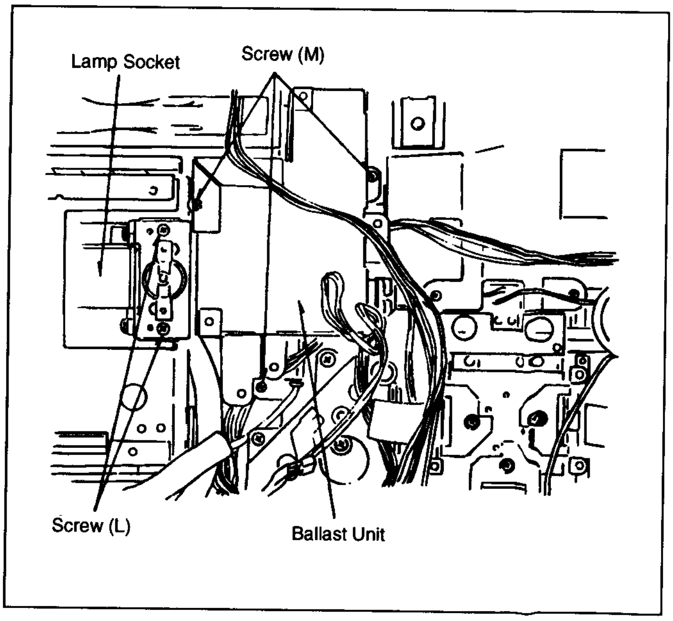

Lamp Socket
Screw (M)
Screw (L)
Ballast Unit

Fig. 8

7. **Remove of Optical Block Unit**
   1. Remove 4 screws (N), and remove the lamp box unit with the lamp fan.
   2. Remove 4 screws (O) and 2 screws (P), and carefully pull out the Optical Block Unit.

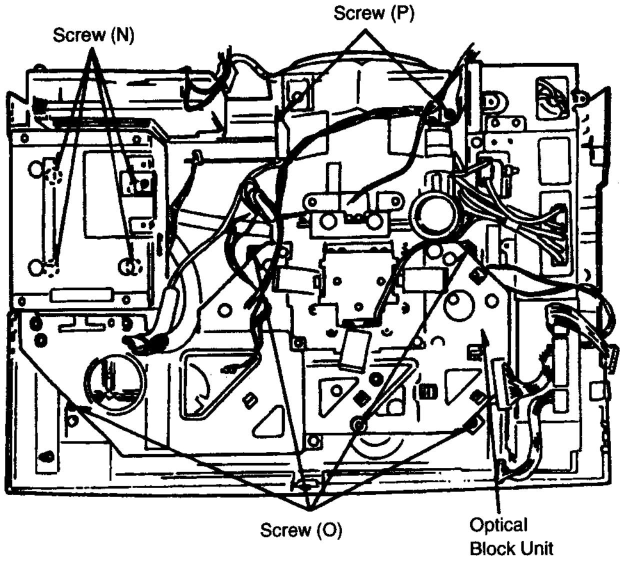

Screw (N)
Screw (P)
Screw (O)
Optical Block Unit

Fig. 9

8. **Removal of P-P.C. Board and K-P.C. Board**
   1. Remove 4 screws (Q).
   2. Disconnect each connector, and remove the power supply unit.
   3. Remove 2 screws (R), and disconnect a connector (K2) on the K-P.C. Board.
   4. Remove 4 screws (S), and remove the K-P.C. Board.

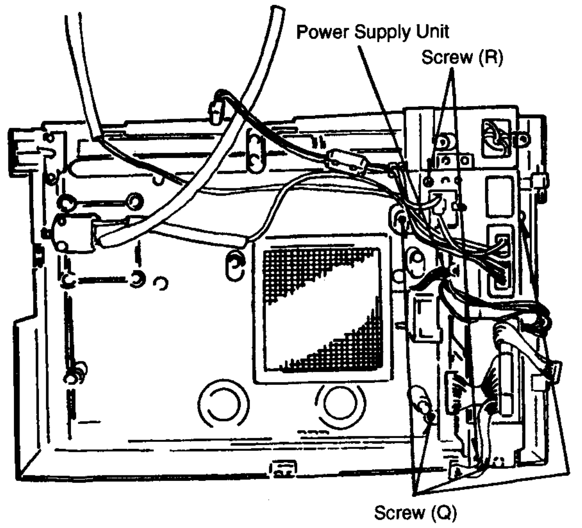

Power Supply Unit
Screw (R)
Screw (Q)

Fig. 10

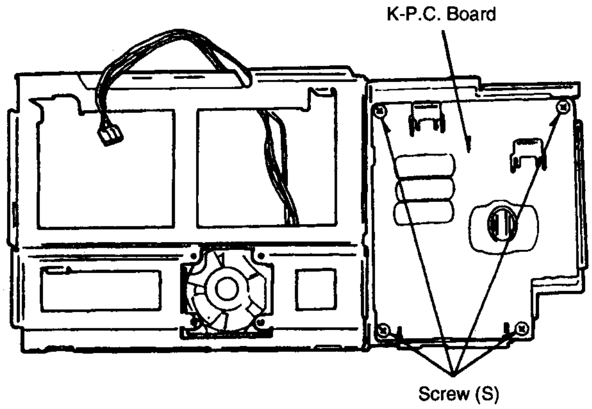

K-P.C. Board
Screw (S)

Fig. 11

5. Remove 2 screws (T) and 3 spacer (U).
6. Disconnect each connector, and remove the P-P.C. Board.

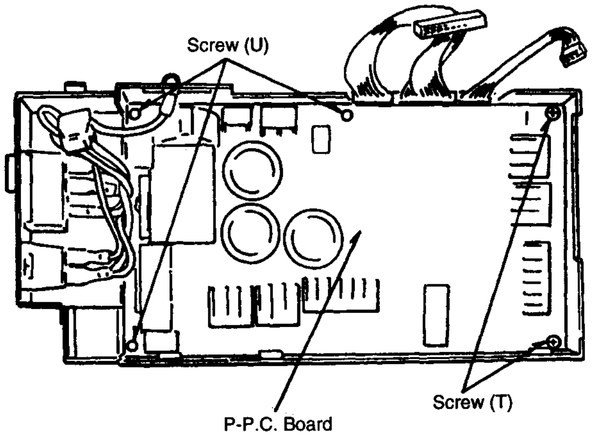

Screw (U)
Screw (T)
P-P.C. Board

Fig. 12

■ Disassembly of Ballast Unit

1. Remove 2 screws (a), and remove the Ballast unit case cover.

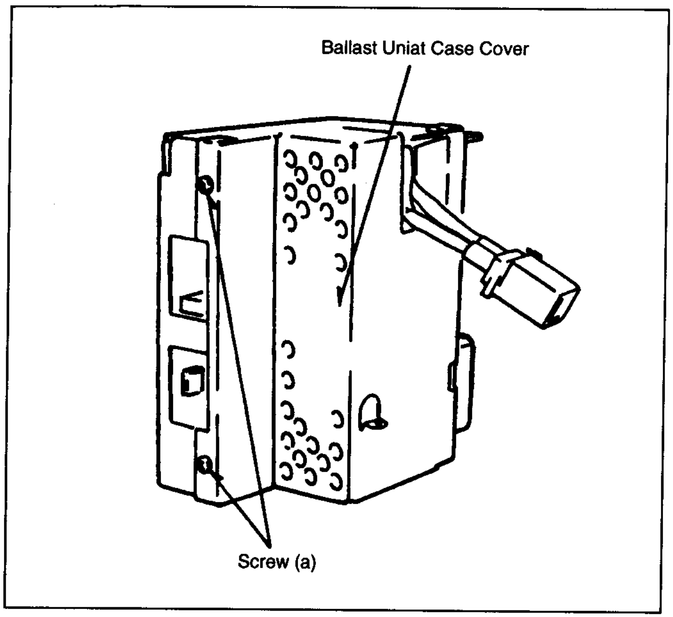

Ballast Uniat Case Cover
Screw (a)

Fig. 13

2. Remove a screw (b).
3. Cut off 3 spacers (c) from back of this unit case, and remove the Ballast Board.

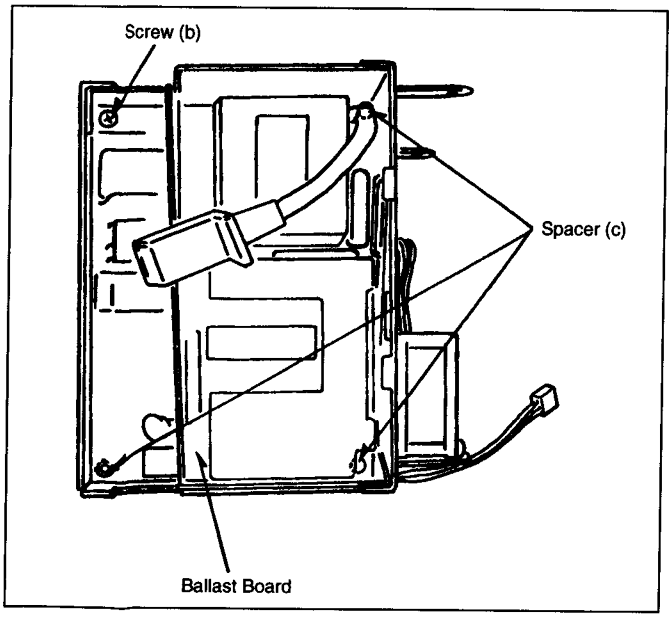

Screw (b)
Spacer (c)
Ballast Board

Fig. 14

■ Disassembly of Optical Block Unit

1. Remove 4 screws (d), and remove the Lens Dust Cover.

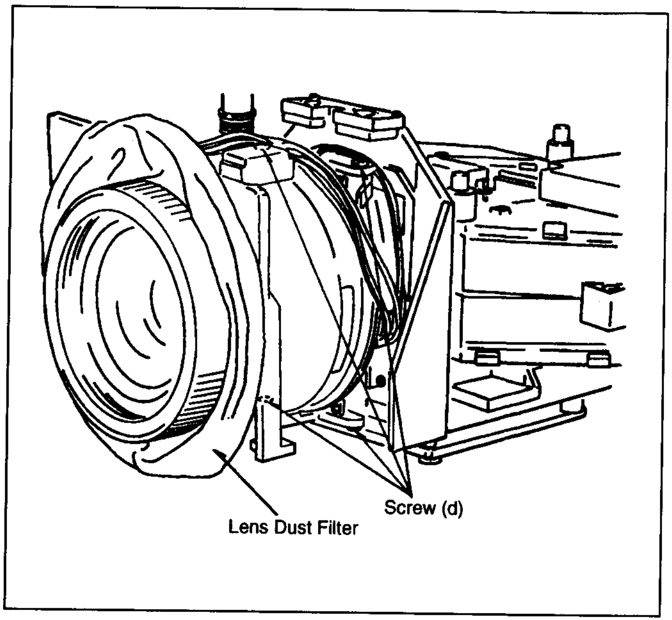

Screw (d)
Lens Dust Filter

Fig. 15

2. Remove 4 Hexagon screw (e), and remove the Lens Unit.

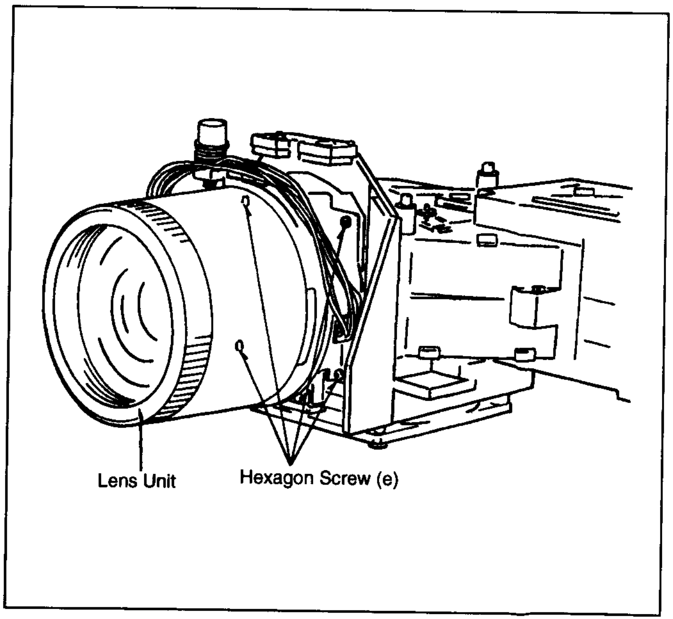

Lens Unit
Hexagon Screw (e)

Fig. 16

■ Removal of LCD Unit

- Remove 3 screws (f), and remove LCD Unit (RED).
- Remove 3 screws (g), and remove LCD Unit (GREEN).
- Remove 3 screws (h), and remove LCD Unit (BLUE).

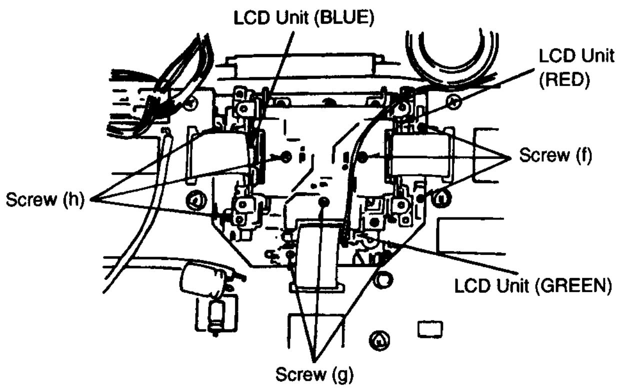

LCD Unit (BLUE)
LCD Unit (RED)
Screw (f)
Screw (h)
LCD Unit (GREEN)
Screw (g)

Fig. 17

ATTENTION:
ADJUSTMENT PROCEDURE should be performed after exchanging the LCD Unit (LCD PANEL).

■ Extension cables

- Use the extension cable when each P.C. Board is checked because there is insufficient space to troubleshoot the board.
- Necessary extension cables are as following table.

Ref. No.	Kind of extension cables	Part No.	Kit No.
Ⓐ	5 Pin	TXJA08VHF6	TZCK3NVHF6
Ⓑ	12 Pin	TXJA10VHF6	
Ⓒ	6 Pin	TXJJ01VHF6	
Ⓓ	2 Pin	TXJP01VHF6	
Ⓔ	P2: 5 Pin / B1: 4 Pin	TXJB01VHF6	
Ⓕ	3 Pin	TXJB02VHF6	

- Connect each P.C. Board by extension cables as shown.

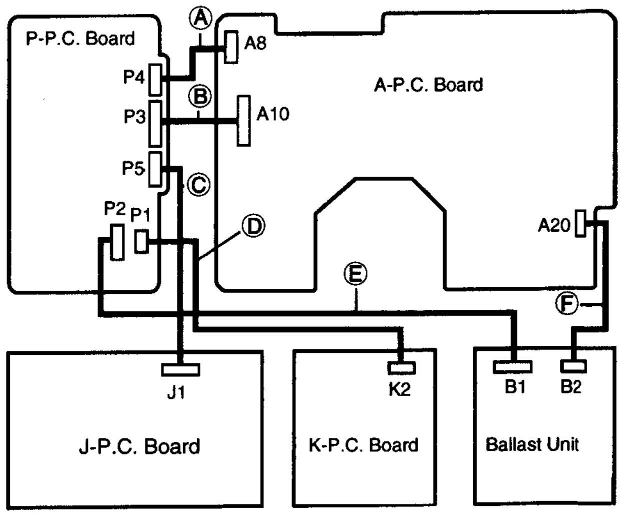
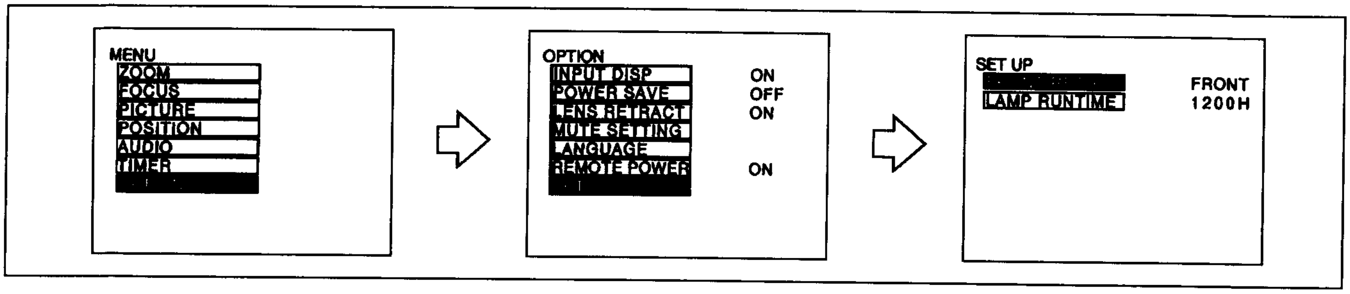

P-P.C. Board
Ⓐ
A8
P4
A-P.C. Board
Ⓑ
P3
A10
P5
Ⓒ
P2
P1
Ⓓ
A20
Ⓔ
Ⓕ
J1
K2
B1
B2
J-P.C. Board
K-P.C. Board
Ballast Unit

Fig. 18

SELF-DIAGNOSIS FUNCTION

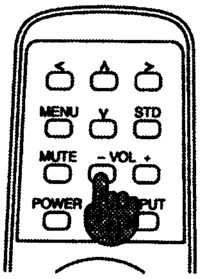
■ Switching Procedure to the Self-Diagnosis Mode

1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "OPTION".
3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "∧" and "∨" buttons to select "SET UP".
5. Press the "<" and ">" buttons to display the SET UP screen.
6. Press the "∧" and "∨" button to select "FRONT/REAR".

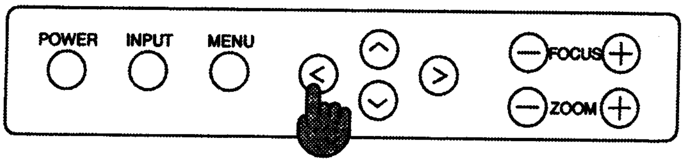

MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
TIMER
OPTION
INPUT DISP ON
POWER SAVE OFF
LENS RETRACT ON
MUTE SETTING
LANGUAGE
REMOTE POWER ON
SET UP
FRONT
LAMP RUNTIME 1200H

7. Keep the "VOL–" button of the remote control pressed and press the Arrow "<" button on the main unit for at least 3 sec.

Remote Control Unit


MENU
STD
MUTE
– VOL +
POWER
PUT

Projector control panel


POWER
INPUT
MENU
FOCUS
ZOOM

■ Self-Diagnosis (Self-check) Screen and Error Locations

Self-Diagnosis (Self-check) Screen			
SELF CHECK			
LAMP TIME	000H	Total On Time for Optical Lamp.	
IC1	OK	Video Processor IC (IC1009)	Check I^2C Bus Communication (A-P.C. Board)
IC2	OK	E^2PROM (IC7001)	
IC3	OK	DAC1 (IC7010)	
IC4	OK	DAC2 (IC7011)	
IC5	OK	DAC3 (IC7015)	
IC6	OK	DAC4 (IC7016)	
LAMP	OK	Optical Lamp Error	Reason Lamp Does Not Turn On
TEMP	OK	Temperature Error	
1800H	OK	Excess Cumulative On Time for Optical Lamp	
FAN	OK	Cooling Fan Stopped (one of the Three fans)	
SUM	OK	Program Error in Microcomputer (IC7000)	A-P.C. Board

■ Results of Self-Check

- When the unit enters Self-Check the above screen appears, allowing the user to identify the location of the error.

[OK] ...... Normal, [--] ...... Error

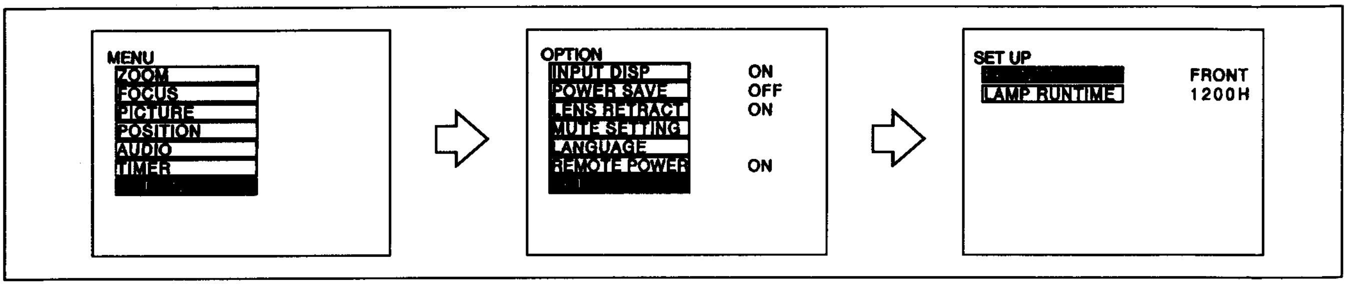
■ Canceling

- The Self-Check screen can be canceled by pressing the "MENU" button on the main unit or the remote control unit.

Service Mode Functions

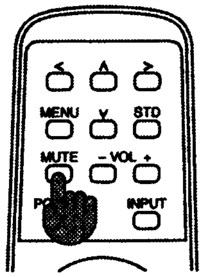
■ Procedure to enter Service Mode

1. Press the MENU button to display the MENU screen.
2. Press the "∧" and "∨" buttons to select "OPTION".
3. Press the "<" and ">" buttons to display the OPTION screen.
4. Press the "∧" and "∨" buttons to select "SET UP".
5. Press the "<" and ">" buttons to display the SET UP screen.
6. Press the "∧" and "∨" button to select "FRONT/REAR".

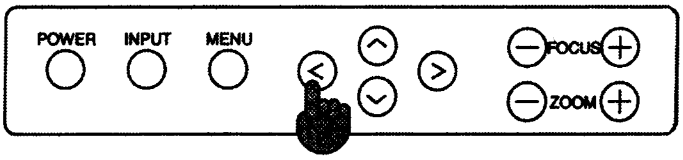

MENU
ZOOM
FOCUS
PICTURE
POSITION
AUDIO
TIMER
OPTION
INPUT DISP
POWER SAVE
LENS RETRACT
MUTE SETTING
LANGUAGE
REMOTE POWER
ON
OFF
ON
ON
SET UP
LAMP RUNTIME
FRONT
1200H

7. Keep the "MUTE" button of the remote control pressed and press the Arrow "<" button on the main unit for at least 3 sec.

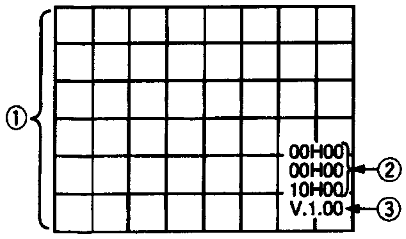
Remote Control Unit


<
∧
>
MENU
∨
STD
MUTE
- VOL +
INPUT

Projector control panel


POWER
INPUT
MENU
FOCUS
ZOOM

■ Service Mode Image


①
00H00
00H00
10H00
V.1.00
②
③

① **Crosshatch Pattern Display**
The crosshatch pattern display is used for the convergence adjustment. The color changes (into 7 colors) with each press of the '<' button on the main body's control panel.

② **Display of Lighting Time of Replaced Lamps**
Displays the cumulative hours of replaced lamps in the past.

③ **Microcomputer Version Display**
Displays the version number of the microcomputer used for this machine.

■ Canceling

- Service Mode functions can be canceled by pressing the "MENU" button on the main unit.

Measurements and Adjustments

Contents

Page

ADJUSTMENT PROCEDURE FLOWCHART........................ 25

LOCATION OF TEST POINTS AND CONTROLS 25

CAUTION FOR SERVICING.. 26

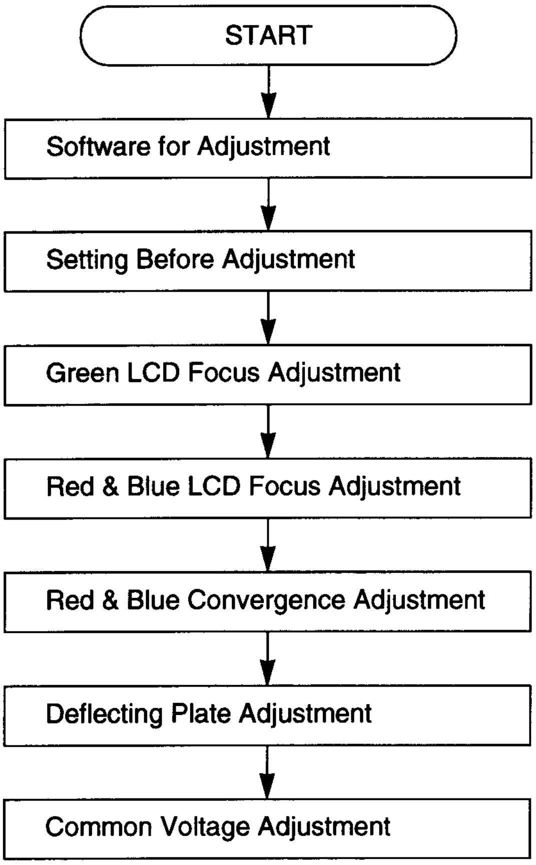
- Cautions for Servicing.. 26
- Lamp Unit 26

ADJUSTMENT PROCEDURE... 26

- Software for Adjustment 26
- Setting Before Adjustment... 27
- Green LCD Focus Adjustment... 27
- Red & Blue LCD Focus Adjustment 27
- Red & Blue Convergence Adjustment 28
- Deflecting Plate Adjustment 29
- Common Voltage Adjustment.. 29

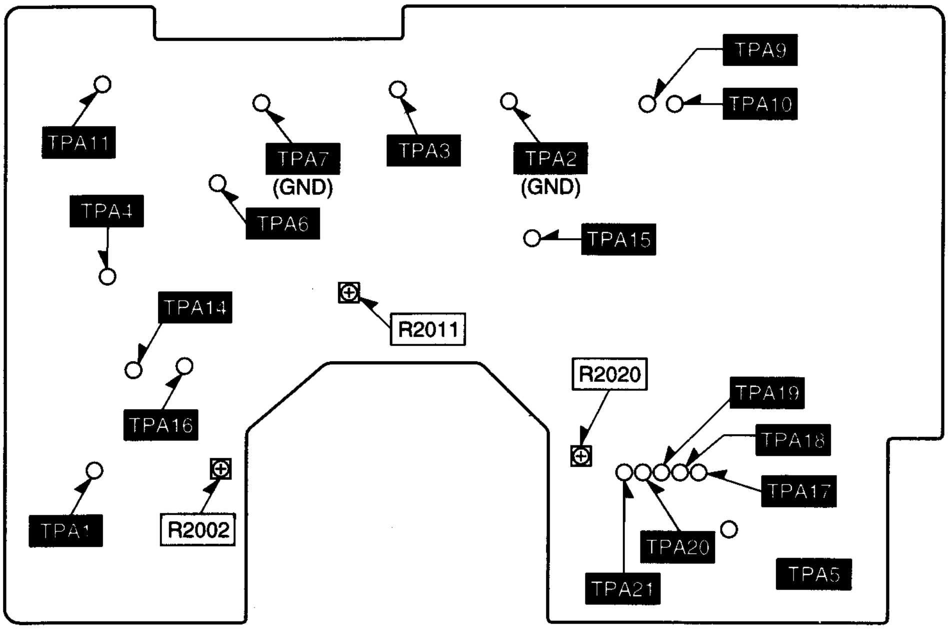
CHECKING POINT PROCEDURE 31

ADJUSTMENT PROCEDURE FLOWCHART


START
Software for Adjustment
Setting Before Adjustment
Green LCD Focus Adjustment
Red & Blue LCD Focus Adjustment
Red & Blue Convergence Adjustment
Deflecting Plate Adjustment
Common Voltage Adjustment

LOCATION OF TEST POINTS and CONTROLS

A-P.C. Board (Component Side)


TPA9
TPA10
TPA11
TPA7
(GND)
TPA3
TPA2
(GND)
TPA4
TPA6
TPA15
TPA14
R2011
R2020
TPA19
TPA16
TPA18
TPA17
TPA1
R2002
TPA20
TPA21
TPA5

CAUTION FOR SERVICING

■ Cautions for Servicing

- Do not turn off the Main Power Switch until the fan has completely stopped.
- To maintain and insure safety, always use designated components for replacement parts. Further, if you have removed any clamps, leads or connectors, always place them back in their proper locations.
  Be careful not to damage the leads or parts when using a soldering iron or similar tool.

■ Lamp Unit

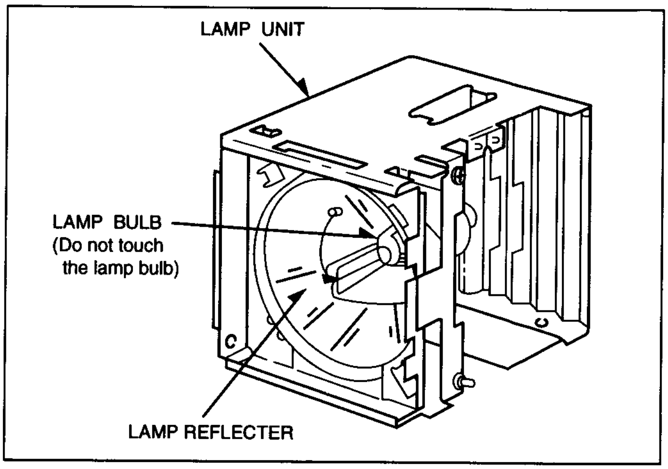


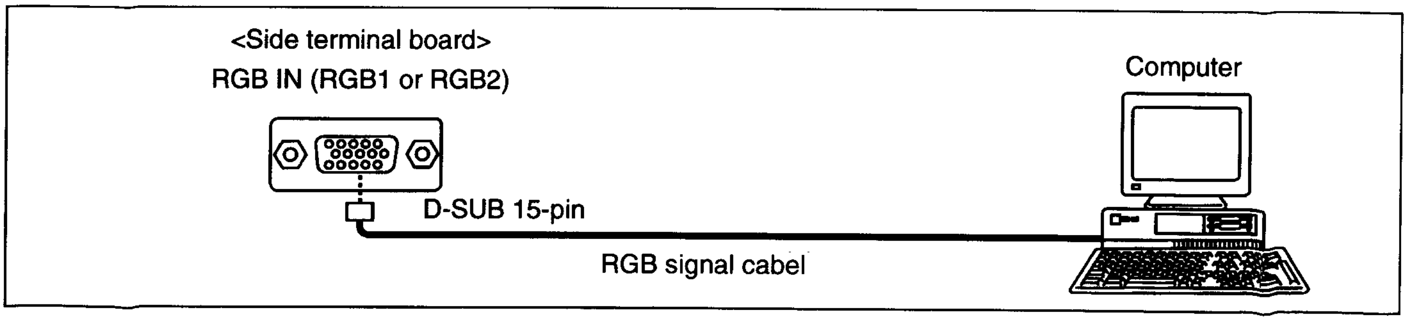
Fig. 1

- Do not use too much force on the Lamp Reflector or the Lamp Bulb, or subject them to unnecessary shocks, since they are both made of glass.
  Be particularly careful when handling the Lamp Bulb as the area around the attachment section is easily broke.
- Do not touch the Lamp Bulb, since any scratches or soiling on the bulb may cause the Lamp Bulb to break when it turns on.
- If the Lamp Reflector is Soiled.
  Clean by wiping the surface gently with a soft and dry cloth.
- Always wear protective goggles when looking at the light from the Lamp Unit.

ADJUSTMENT PROCEDURE

■ Software for Adjustment

- Computer-aided adjustment should be made to this projector.
  Call Customer Service Department for details of the adjusting software when ADJUSTMENT PROCEDURE becomes necessary.
- Read instructions of the manual attached to the software and install it only as directed.
- Start ADJUSTMENT PROCEDURE after connecting an RGB signal cable between computer and projector as shown in the following figure.(Do not make a connection when adjusting polarizing plate.)



■ Settings Before Adjustment

1. Press the ZOOM (+) buttons on the operation panel on the top of the projector to adjust the largest size of the picture.
2. Locate the projector at a place so that 1 meter projection distance will be maintained.
3. Turn the focus ring leftward fully when viewed form the front side of the projector, and ensure that 30" -wide projected image is obtained.

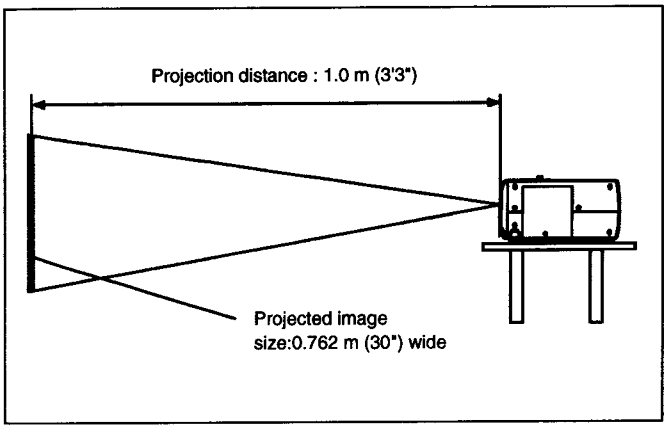

Projection distance : 1.0 m (3'3")
Projected image size:0.762 m (30") wide

Fig. 2

■ Green LCD Focus Adjustment

1. **EQUIPMENT TO BE USED**
   Computer (adjusting software preinstalled computer)
2. **INITIAL CONDITION**
   PICTURE SIZE......0.762 m (30") wide
3. **ADJUSTMENT**
   1. Input Green Single dot pattern image into RGB IN (RGB1 or RGB2) by running the adjusting software.
   2. Adjust the Focus ring so that the entire image on the screen is displayed in balance.
   3. Loosen 3 screws (B).
   4. Handle the LCD Unit (Green) to obtain correct focus of the screen both vertically and laterally.
   5. Tighten 3 screws (B).

   ATTENTION: Never handle the focus ring after completion of the Green LCD Focus Adjustment till when any other adjusting operation is finished.

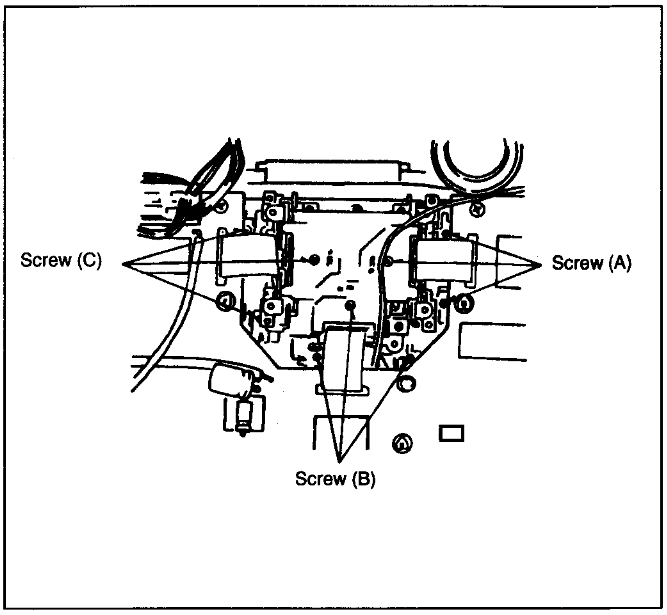


Fig. 3

■ Red & Blue LCD Focus Adjustment

1. **EQUIPMENT TO BE USED**
   Computer (adjusting software preinstalled computer)
2. **INITIAL CONDITION**
   PICTURE SIZE......30" wide
3. **ADJUSTMENT**
   1. This adjustment should be made after performing Green LCD Focus Adjustment.

   <Red LCD Focus Adj.>

   2. Input Red Single dot pattern image into RGB IN (RGB1 or RGB2) by running the adjusting software.
   3. loosen 3 screws (A). (See Fig. 3)
   4. Handle the LCD Unit (Red) to obtain correct focus of the screen both vertically and laterally.
   5. Tighten 3 screws (A).
   6. Always perform the Red & Blue Convergence Adjustment.

   <Blue LCD Focus Adj.>

   7. Input Blue Single dot pattern image into RGB IN (RGB1 or RGB2) by running the adjusting software.
   8. Loosen 3 screws (C). (See Fig. 3)
   9. Handle the LCD Unit (Blue) to obtain correct focus of the screen both vertically and laterally.
   10. Tighten 3 screws (C).
   11. Always perform the Red & Blue Convergence Adjustment.

■ Red & Blue Convergence Adjustment

1. **EQUIPMENT TO BE USED**
    - Computer (adjusting software preinstalled computer)
    - Hexagonal screw driver(1.3 mm)
2. **INITIAL CONDITION**

    PICTURE SIZE......0.762 m (30") wide
3. **ADJUSTMENT**
    1. This adjustment should be made after performing both the Green LCD Focus Adjustment and the Red & Blue LCD Focus Adjustment, in order to bring the Red & Blue images into convergence, based on the standard for the Green image.

    <Red Convergence Adj.>

    2. Input Red & Green crosshatch pattern image into RGB IN (RGB1 or RGB2) by running the adjusting software.
    3. Turn 3 hexagonal adjusting screws (Rc1, Rc2 and Rc3) for the Red & Green crosshatch pattern image to obtain correct position by referring Table 1.

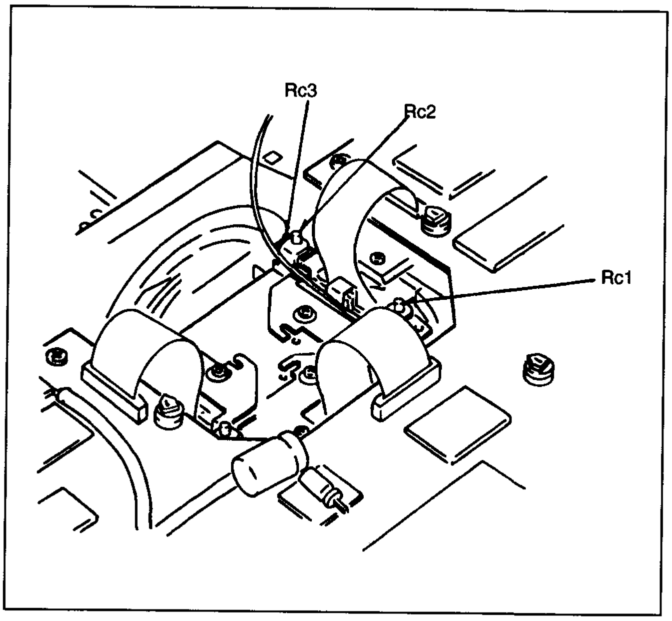


Fig. 4

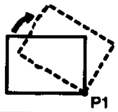
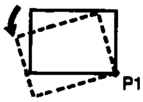
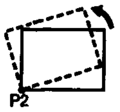
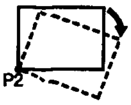
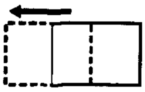
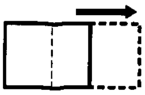
Hexagonal Adjusting Screw	Rotation	Response of Screen	Image
Rc1, Bc1	Clockwise	Screen rotates clockwise around P1 in the lower right corner of the screen.	
	Counterclockwise	Screen rotates counterclockwise around P1 in the lower right corner of the screen.	
Rc2, Bc2	Clockwise	Screen rotates counterclockwise around P2 in the lower left corner of the screen.	
	Counterclockwise	Screen rotates clockwise around P2 in the lower left corner of the screen.	
Rc3, Bc3	Clockwise	The entire screen moves to the left.	
	Counterclockwise	The entire screen moves to the right.	

Table 1

<Blue Convergence Adj.>

4. Input Blue & Green crosshatch pattern image into RGB IN (RGB1 or RGB2) by running the adjusting software.
5. Turn 3 hexagonal adjusting screws (Bc1. Bc2 and Bc3) for the Blue & Green crosshatch pattern image to obtain correct position by referring Table 1.

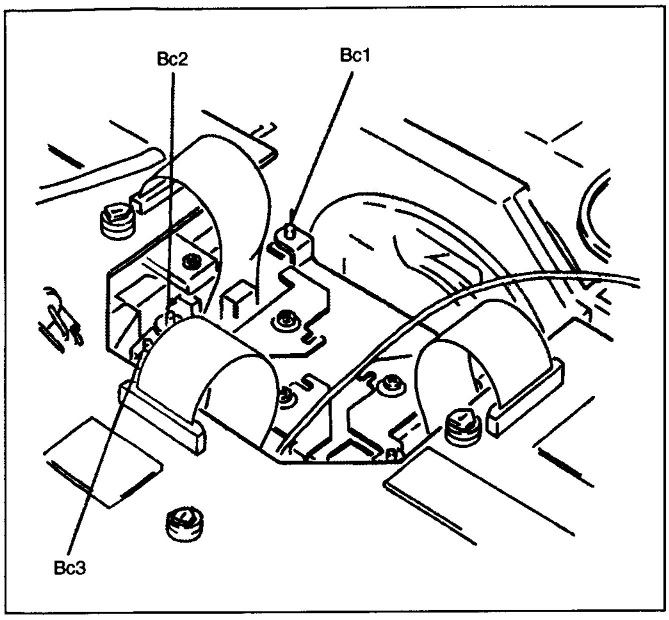


Fig. 5

6. Input the crosshatch pattern image into RGB IN.
7. Confirm that the Red & Blue crosshatch pattern aligns exactly with the Green crosshatch pattern.
8. Repeat steps 2-7 if there is any distortion.

■ Deflecting Plate Adjustment

1. **EQUIPMENT TO BE USED**
   Epoxide Resin Adhesive
2. **INITIAL CONDITION**
   BACK COLOR......BLACK
3. **ADJUSTMENT**
   1. Nothing should be connected to the input terminal when performing thins adjustment.

   <Red Deflecting Plate Adj.>

   2. Loosen a screw (Rd).

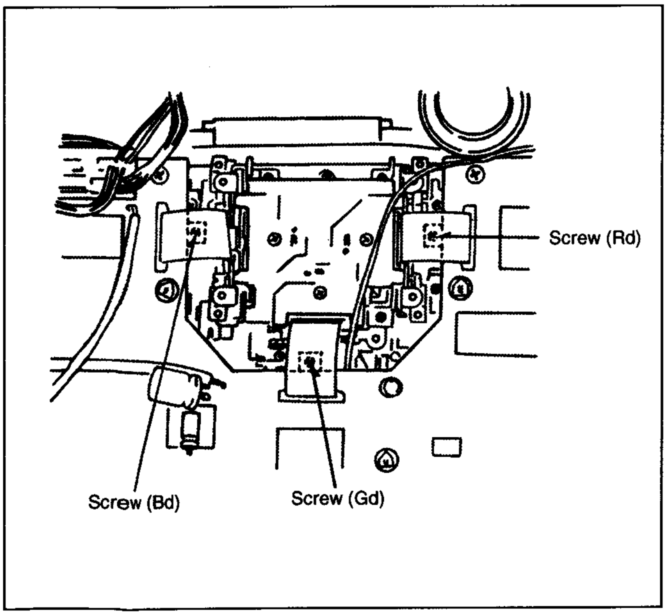


Fig. 6

   3. Move the screw (Rd) form side to side to lower black color on the screen as much as possible.
   4. Tighten a screw (Rd).
   5. Apply adhesive to the screw (Rd) and fix it firmly.

   <Green Deflecting Plate Adj.>

   6. Loosen a screw (Gd). (See Fig. 6)
   7. Move the screw (Gd) from side to side to lower black color on the screen as much as possible.
   8. Tighten a screw (Gd).
   9. Apply adhesive to the screw (Gd) and fix it firmly.

   <Blue Deflecting Plate Adj.>

   10. Loosen a screw (Bd). (See Fig. 6)
   11. Move the screw (Bd) from side to side to lower black color on the screen as much as possible.
   12. Tighten a screw (Bd).
   13. Apply adhesive to the screw (Bd) and fix it firmly.
   14. Receive signals and check to see that extreme black floating and/or sinking is not observed upon completion of adjustment.

■ Common Voltage Adjustment

1. **EQUIPMENT TO BE USED**
   Computer (adjusting software preinstalled computer)
   Digital Voltmeter
   Two sheets of Black Papers (The size of the paper should be large enough to shield the light reaching the LCD Unit.)
2. **INITIAL CONDITION**
   PICTURE SIZE......0.762 m (30") wide
3. **ADJUSTMENT**
   1. Input a pattern image marked with continuous alternating white and black stripes into RGB IN (RGB1 or RGB2) by running the adjusting software.

   <LCD Unit (Green) Adj.>

   2. Connect a digital voltmeter to 2 pin of R2011 and ground (TPA2 or TPA7).

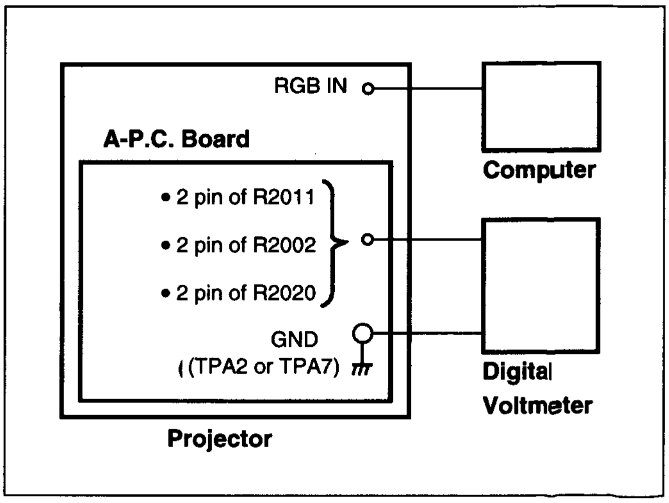


Fig. 7

   3. Insert the black paper to Ⓐ and Ⓒ so that no light comes from any object other than LCD Unit (Green). (See Fig. 8)

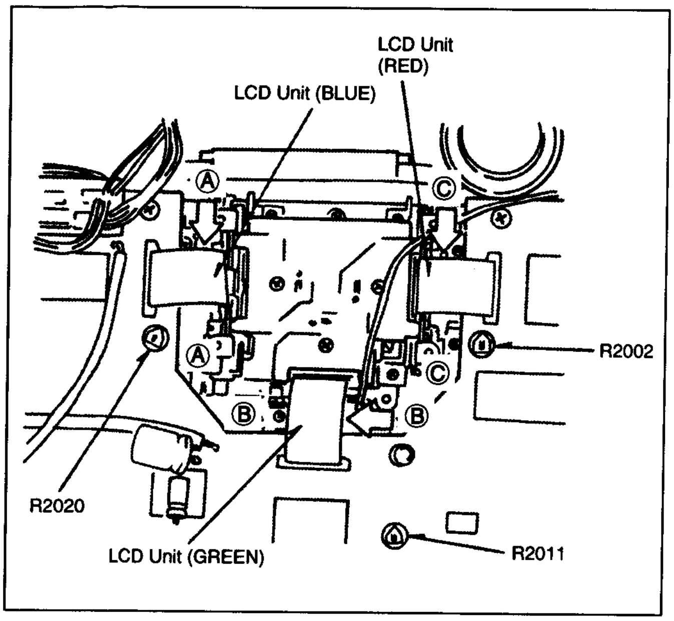


Fig. 8

4. Adjust R2011 to reduce luminance flicker as much as possible.
5. Ensure that the voltage of 2 pin of R2011 shows 4.9V approximately.
6. Adjust R2011 again when the reading shows a figure far from 4.9V.

<LCD Unit (Red) Adj.>

7. Connect a digital voltmeter to 2 pin of R2002 and ground (TPA2 or TPA7). (See Fig. 7)
8. Insert the black paper to Ⓐ and Ⓑ so that no light comes from any object other than LCD Unit (Red). (See Fig. 8)
9. Adjust R2002 to reduce luminance flicker as much as possible.
10. Ensure that the voltage of 2 pin of R2002 shows 4.9V approximately.
11. Adjust R2002 again when the reading shows a figure far from 4.9V.

<LCD Unit (Blue) Adj.>

12. Connect a digital voltmeter to 2 pin of R2002 and ground (TPA2 or TPA7).
13. Insert the black paper between Ⓑ and Ⓒ so that no light comes from any object other than LCD Unit (Blue). (See Fig. 8)
14. Adjust R2020 to reduce luminance flicker as much as possible.
15. Ensure that the voltage of 2 pin of R2020 shows 4.7V approximately.
16. Adjust R2020 again when the reading shows a figure far from 4.7V.

MEMO:

Checking Point Procedure

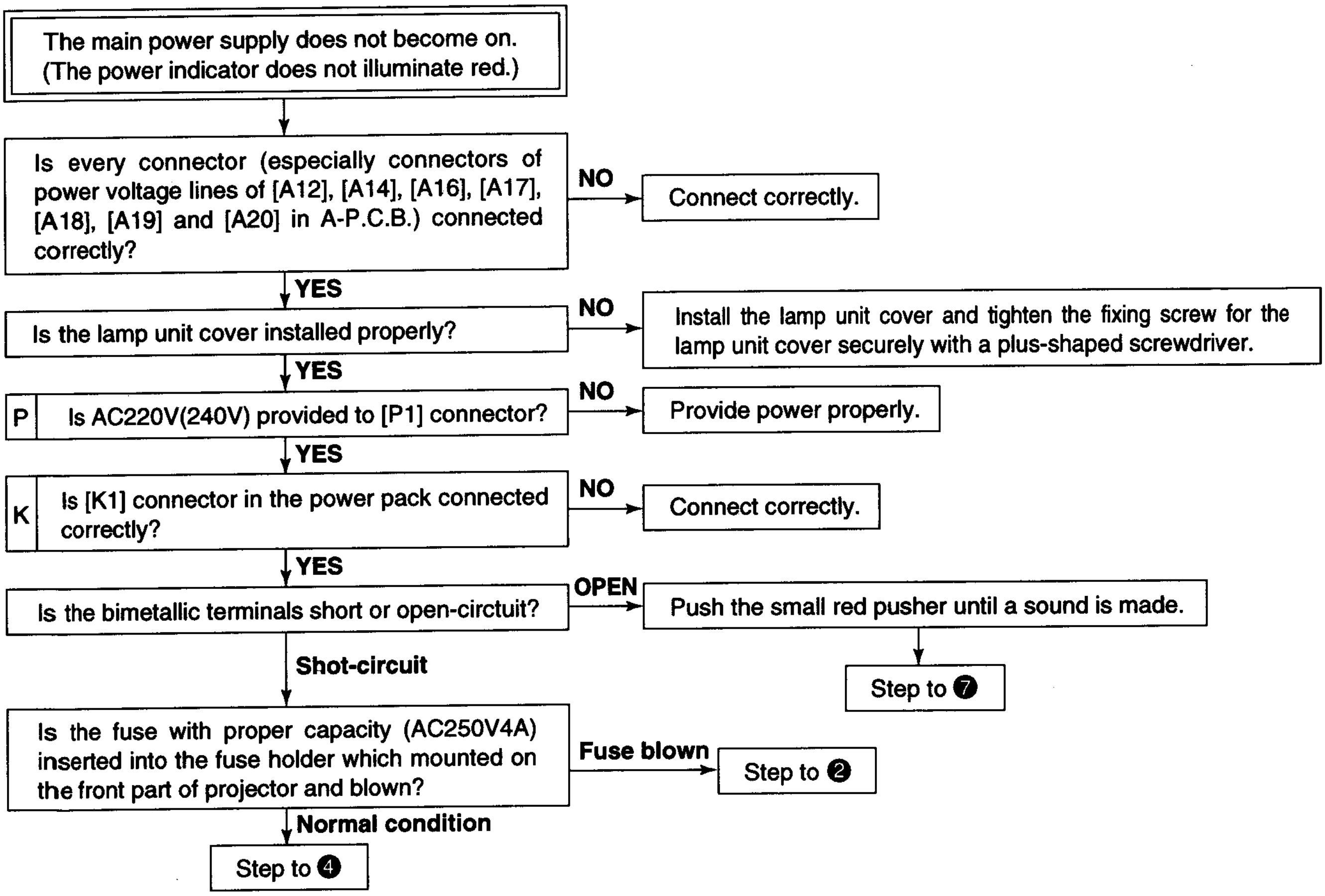
- The letters in front of the inspection outline items indicate the P.C. boards related to the respective item.

Note: A

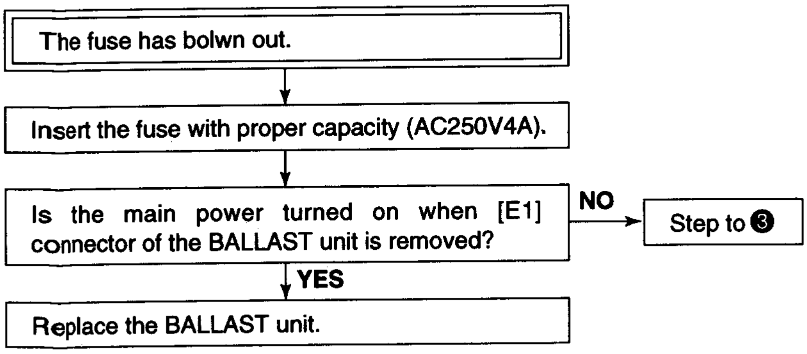
The Alphabet indicates the P.C.Board Name.

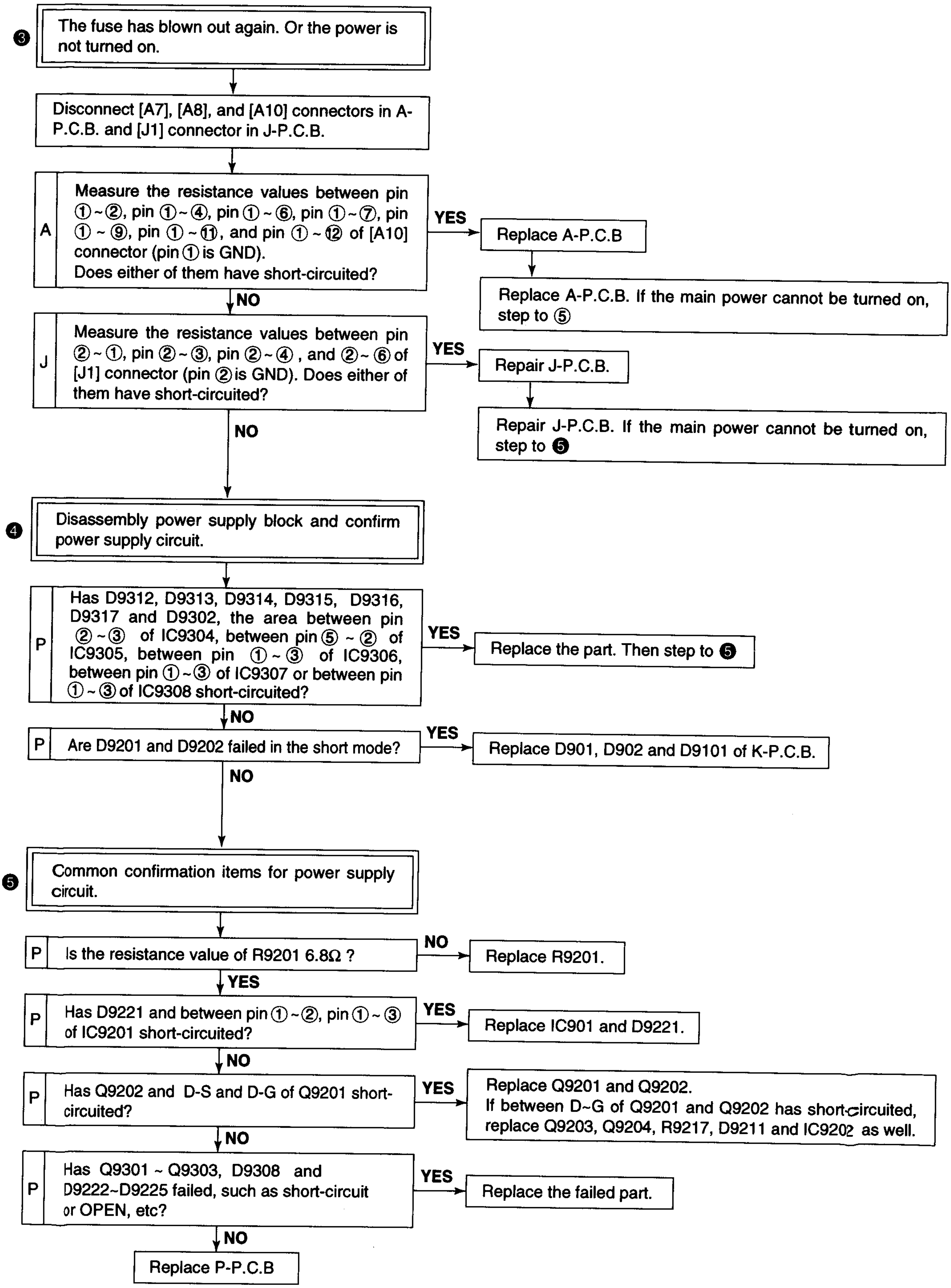
- If you replace the A-P.C. Board, first remove the IC7001(EEPROM:24LC16 BIPA24) from old - P.C. Board, then install removed IC on the new P.C. Board.

❶


The main power supply does not become on. (The power indicator does not illuminate red.)
Is every connector (especially connectors of power voltage lines of [A12], [A14], [A16], [A17], [A18], [A19] and [A20] in A-P.C.B.) connected correctly?
NO
Connect correctly.
YES
Is the lamp unit cover installed properly?
NO
Install the lamp unit cover and tighten the fixing screw for the lamp unit cover securely with a plus-shaped screwdriver.
YES
P
Is AC220V(240V) provided to [P1] connector?
NO
Provide power properly.
YES
K
Is [K1] connector in the power pack connected correctly?
NO
Connect correctly.
YES
Is the bimetallic terminals short or open-circuit?
OPEN
Push the small red pusher until a sound is made.
Step to ❼
Shot-circuit
Is the fuse with proper capacity (AC250V4A) inserted into the fuse holder which mounted on the front part of projector and blown?
Fuse blown
Step to ❷
Normal condition
Step to ❹

❷


The fuse has bolwn out.
Insert the fuse with proper capacity (AC250V4A).
Is the main power turned on when [E1] connector of the BALLAST unit is removed?
NO
Step to ❸
YES
Replace the BALLAST unit.



❸ The fuse has blown out again. Or the power is not turned on.

Disconnect [A7], [A8], and [A10] connectors in A-P.C.B. and [J1] connector in J-P.C.B.

A: Measure the resistance values between pin ①~②, pin ①~④, pin ①~⑥, pin ①~⑦, pin ①~⑨, pin ①~⑪, and pin ①~⑫ of [A10] connector (pin ① is GND). Does either of them have short-circuited?

YES: Replace A-P.C.B → Replace A-P.C.B. If the main power cannot be turned on, step to ⑤

NO:

J: Measure the resistance values between pin ②~①, pin ②~③, pin ②~④, and ②~⑥ of [J1] connector (pin ② is GND). Does either of them have short-circuited?

YES: Repair J-P.C.B. → Repair J-P.C.B. If the main power cannot be turned on, step to ❺

NO:

❹ Disassembly power supply block and confirm power supply circuit.

P: Has D9312, D9313, D9314, D9315, D9316, D9317 and D9302, the area between pin ②~③ of IC9304, between pin ⑤~② of IC9305, between pin ①~③ of IC9306, between pin ①~③ of IC9307 or between pin ①~③ of IC9308 short-circuited?

YES: Replace the part. Then step to ❺

NO:

P: Are D9201 and D9202 failed in the short mode?

YES: Replace D901, D902 and D9101 of K-P.C.B.

NO:

❺ Common confirmation items for power supply circuit.

P: Is the resistance value of R9201 6.8Ω ?

NO: Replace R9201.

YES:

P: Has D9221 and between pin ①~②, pin ①~③ of IC9201 short-circuited?

YES: Replace IC901 and D9221.

NO:

P: Has Q9202 and D-S and D-G of Q9201 short-circuited?

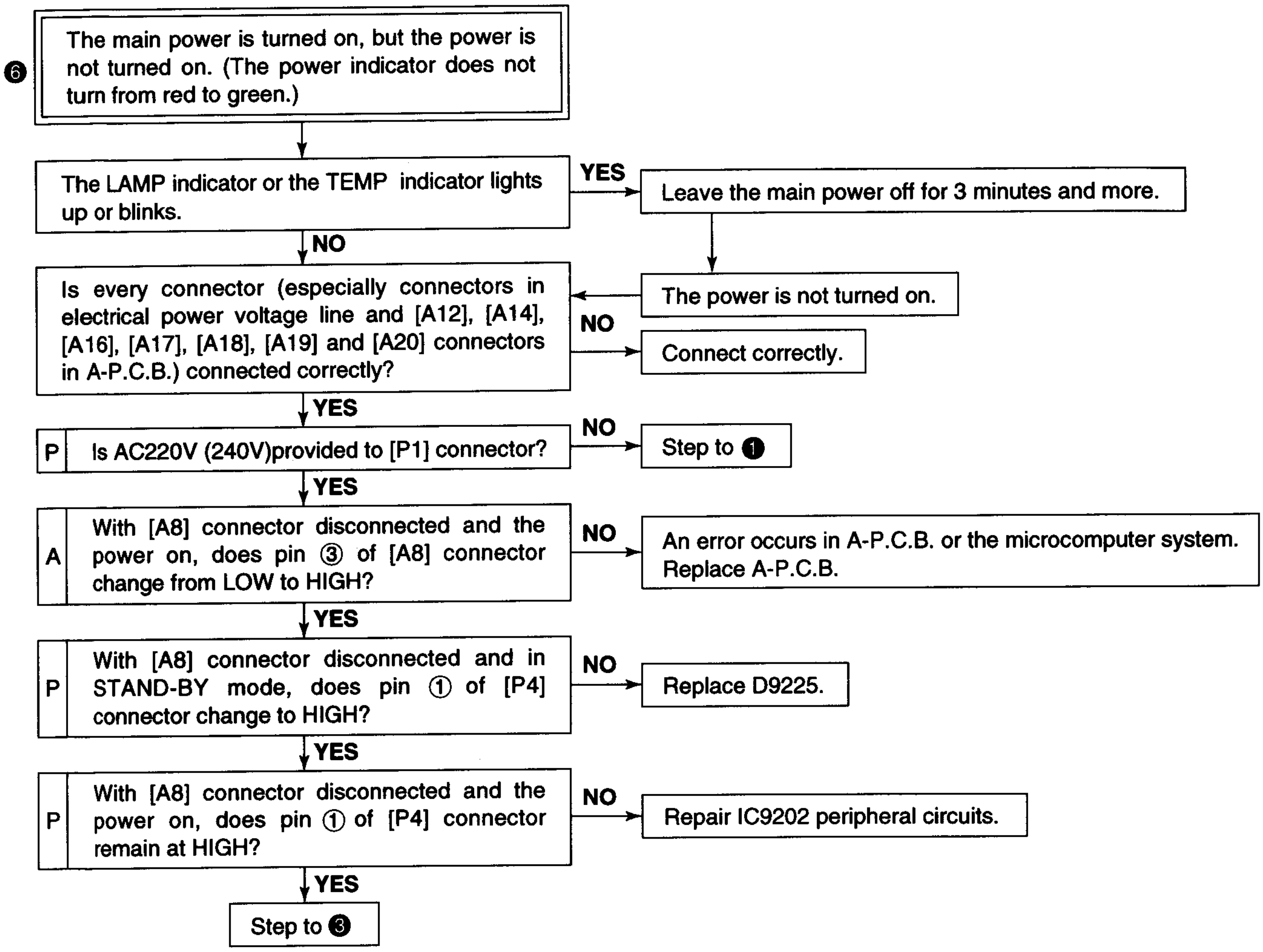
YES: Replace Q9201 and Q9202. If between D~G of Q9201 and Q9202 has short-circuited, replace Q9203, Q9204, R9217, D9211 and IC9202 as well.

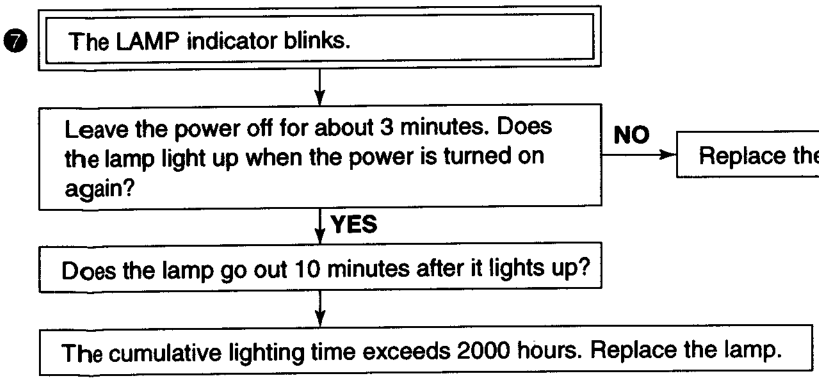
NO:

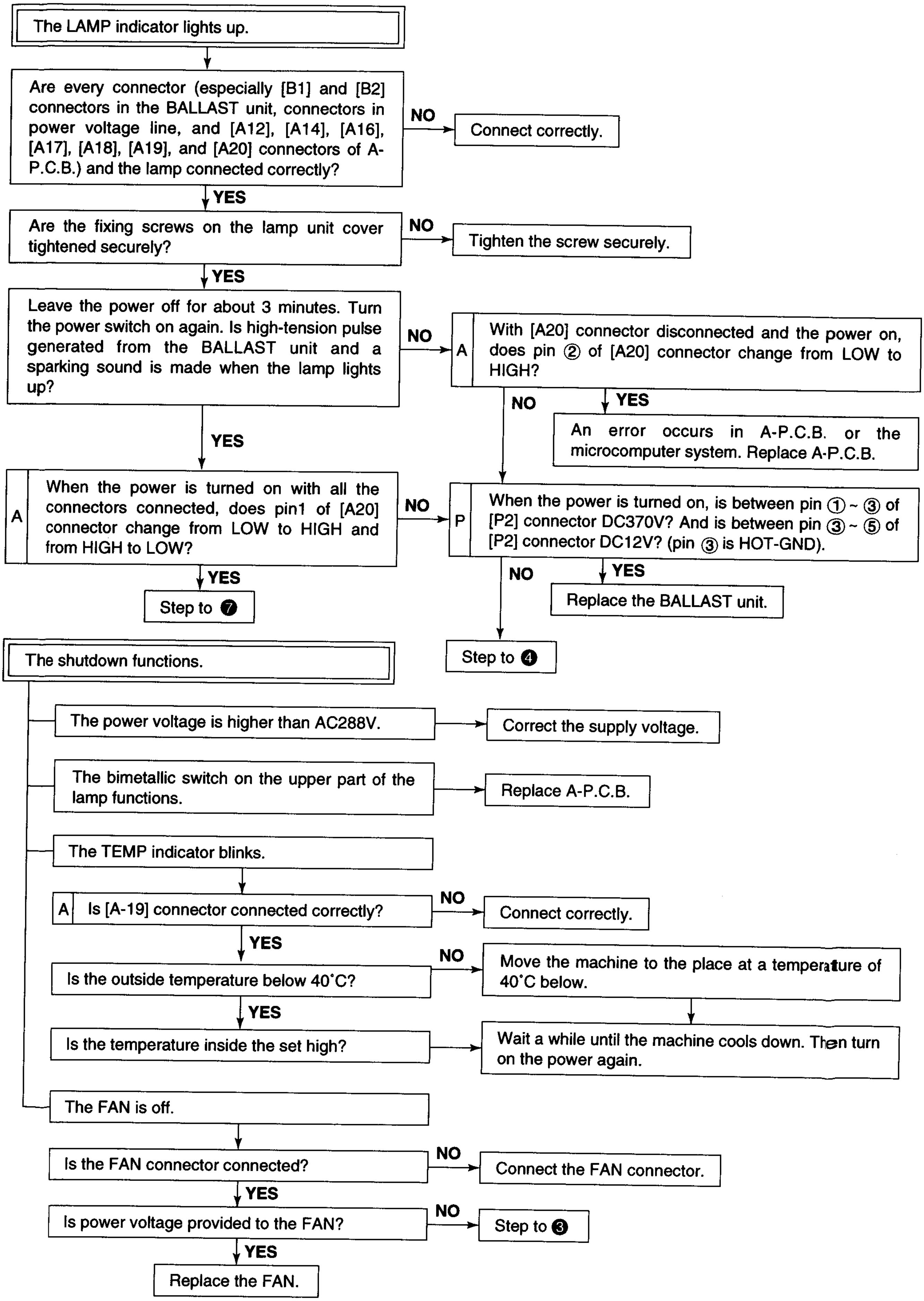
P: Has Q9301 ~ Q9303, D9308 and D9222~D9225 failed, such as short-circuit or OPEN, etc?

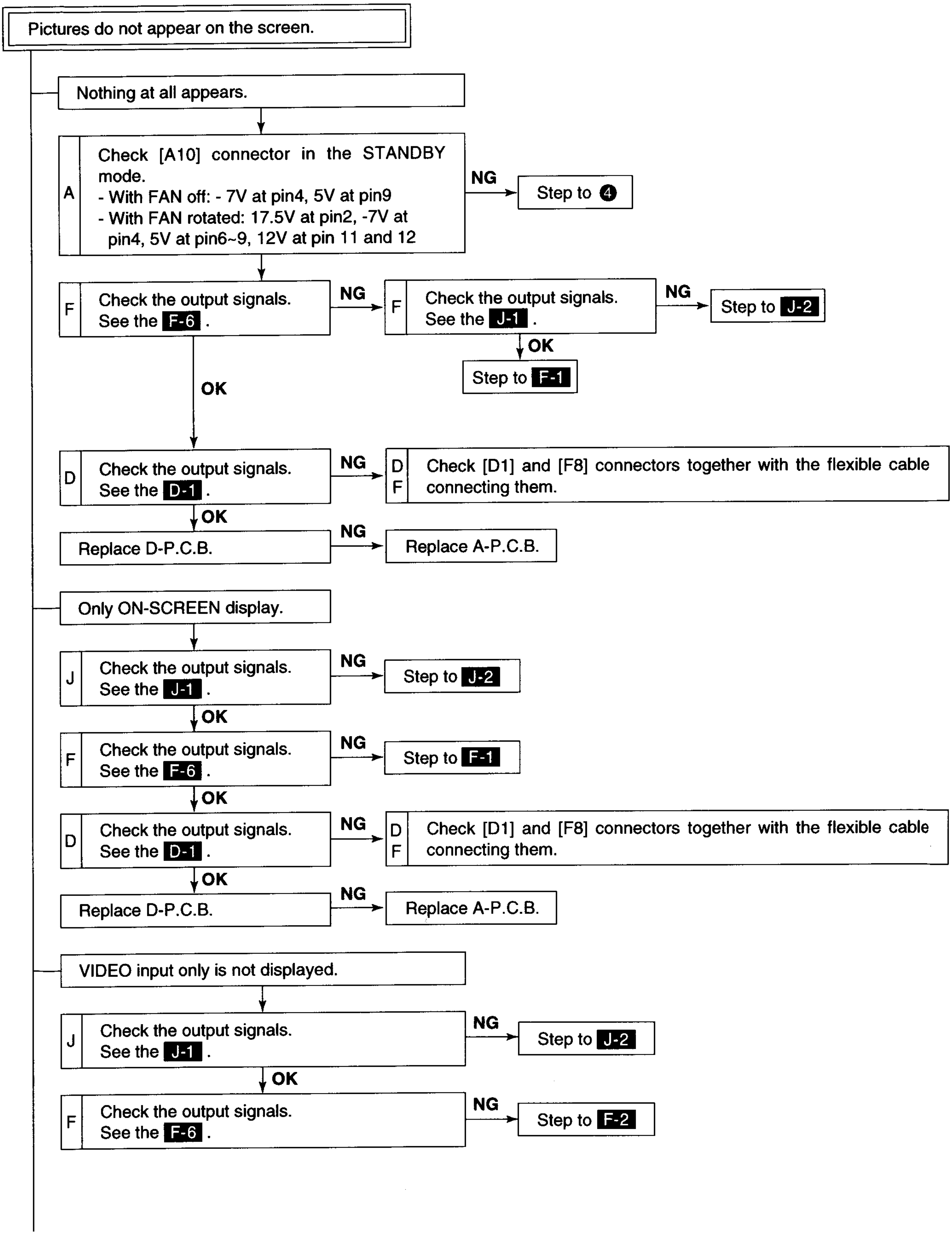
YES: Replace the failed part.

NO: Replace P-P.C.B

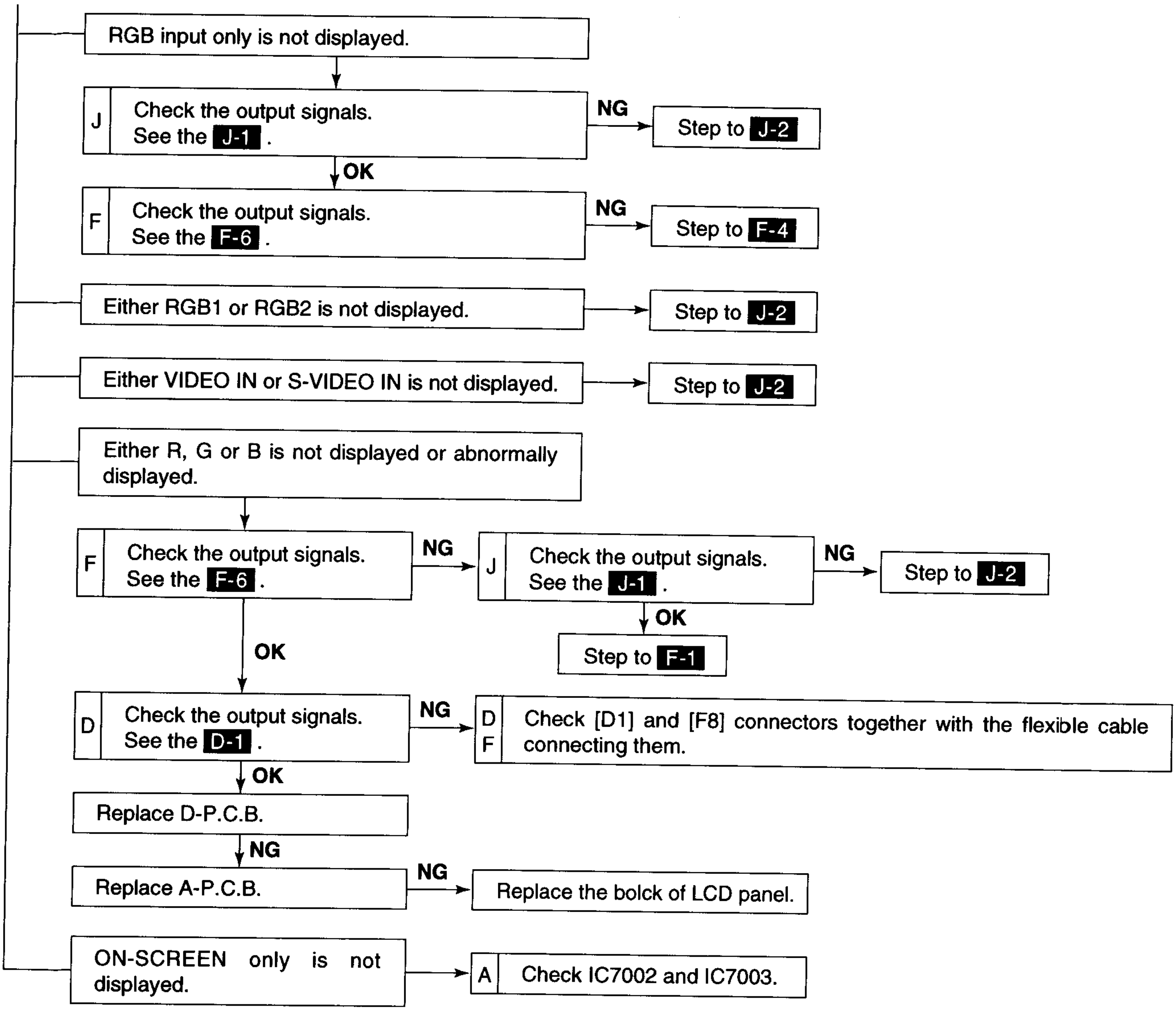

❻
The main power is turned on, but the power is not turned on. (The power indicator does not turn from red to green.)
The LAMP indicator or the TEMP indicator lights up or blinks.
YES
Leave the main power off for 3 minutes and more.
The power is not turned on.
NO
Is every connector (especially connectors in electrical power voltage line and [A12], [A14], [A16], [A17], [A18], [A19] and [A20] connectors in A-P.C.B.) connected correctly?
NO
Connect correctly.
YES
P
Is AC220V (240V)provided to [P1] connector?
NO
Step to ❶
YES
A
With [A8] connector disconnected and the power on, does pin ③ of [A8] connector change from LOW to HIGH?
NO
An error occurs in A-P.C.B. or the microcomputer system. Replace A-P.C.B.
YES
P
With [A8] connector disconnected and in STAND-BY mode, does pin ① of [P4] connector change to HIGH?
NO
Replace D9225.
YES
P
With [A8] connector disconnected and the power on, does pin ① of [P4] connector remain at HIGH?
NO
Repair IC9202 peripheral circuits.
YES
Step to ❸

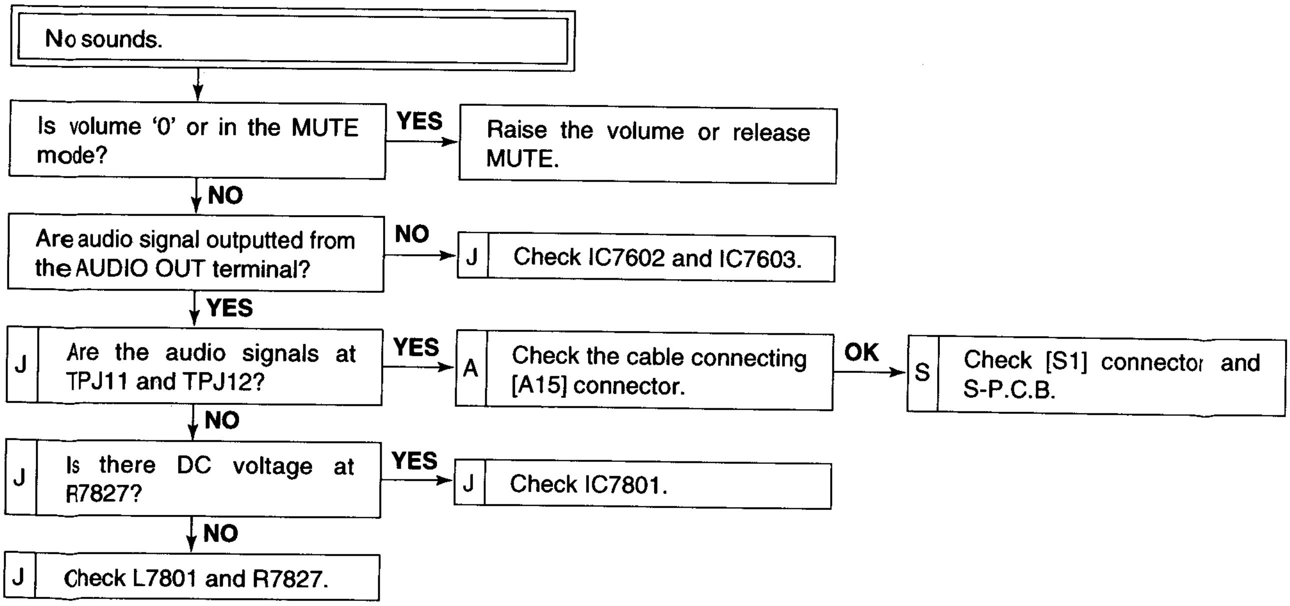

❼
The LAMP indicator blinks.
Leave the power off for about 3 minutes. Does the lamp light up when the power is turned on again?
NO
Replace the lamp.
YES
Does the lamp go out 10 minutes after it lights up?
The cumulative lighting time exceeds 2000 hours. Replace the lamp.

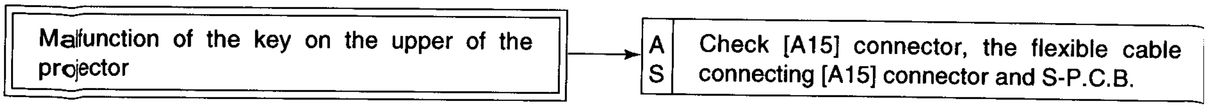

The LAMP indicator lights up.
Are every connector (especially [B1] and [B2] connectors in the BALLAST unit, connectors in power voltage line, and [A12], [A14], [A16], [A17], [A18], [A19], and [A20] connectors of A-P.C.B.) and the lamp connected correctly?
NO
Connect correctly.
YES
Are the fixing screws on the lamp unit cover tightened securely?
NO
Tighten the screw securely.
YES
Leave the power off for about 3 minutes. Turn the power switch on again. Is high-tension pulse generated from the BALLAST unit and a sparking sound is made when the lamp lights up?
NO
A
With [A20] connector disconnected and the power on, does pin ② of [A20] connector change from LOW to HIGH?
NO
YES
An error occurs in A-P.C.B. or the microcomputer system. Replace A-P.C.B.
YES
A
When the power is turned on with all the connectors connected, does pin1 of [A20] connector change from LOW to HIGH and from HIGH to LOW?
NO
P
When the power is turned on, is between pin ① ~ ③ of [P2] connector DC370V? And is between pin ③ ~ ⑤ of [P2] connector DC12V? (pin ③ is HOT-GND).
NO
YES
Replace the BALLAST unit.
YES
Step to ❼
Step to ❹
The shutdown functions.
The power voltage is higher than AC288V.
Correct the supply voltage.
The bimetallic switch on the upper part of the lamp functions.
Replace A-P.C.B.
The TEMP indicator blinks.
A
Is [A-19] connector connected correctly?
NO
Connect correctly.
YES
Is the outside temperature below 40°C?
NO
Move the machine to the place at a temperature of 40°C below.
YES
Is the temperature inside the set high?
Wait a while until the machine cools down. Then turn on the power again.
The FAN is off.
Is the FAN connector connected?
NO
Connect the FAN connector.
YES
Is power voltage provided to the FAN?
NO
Step to ❸
YES
Replace the FAN.

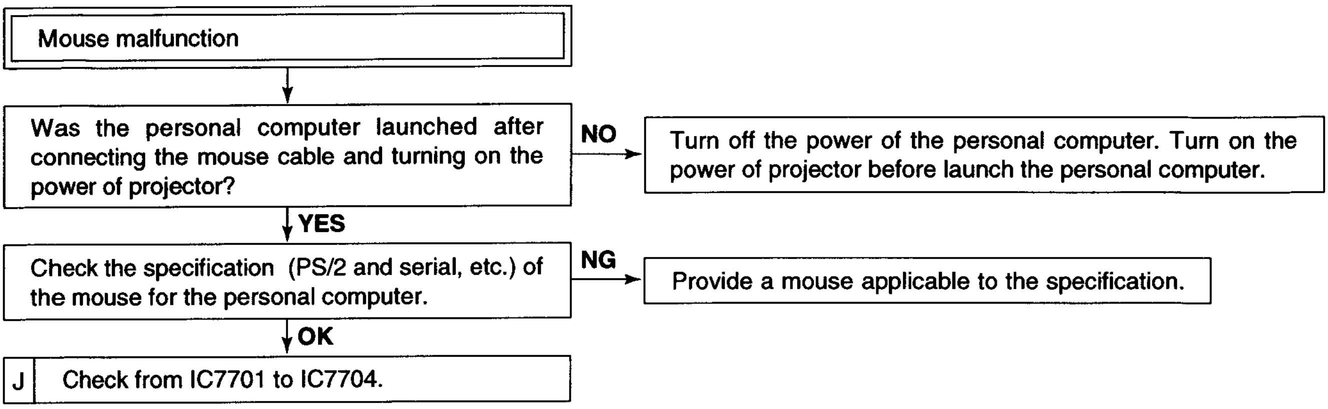

Pictures do not appear on the screen.
Nothing at all appears.
A
Check [A10] connector in the STANDBY mode.
- With FAN off: - 7V at pin4, 5V at pin9
- With FAN rotated: 17.5V at pin2, -7V at pin4, 5V at pin6~9, 12V at pin 11 and 12
NG
Step to ❹
F
Check the output signals.
See the F-6 .
NG
F
Check the output signals.
See the J-1 .
NG
Step to J-2
OK
Step to F-1
OK
D
Check the output signals.
See the D-1 .
NG
D F
Check [D1] and [F8] connectors together with the flexible cable connecting them.
OK
Replace D-P.C.B.
NG
Replace A-P.C.B.
Only ON-SCREEN display.
J
Check the output signals.
See the J-1 .
NG
Step to J-2
OK
F
Check the output signals.
See the F-6 .
NG
Step to F-1
OK
D
Check the output signals.
See the D-1 .
NG
D F
Check [D1] and [F8] connectors together with the flexible cable connecting them.
OK
Replace D-P.C.B.
NG
Replace A-P.C.B.
VIDEO input only is not displayed.
J
Check the output signals.
See the J-1 .
NG
Step to J-2
OK
F
Check the output signals.
See the F-6 .
NG
Step to F-2

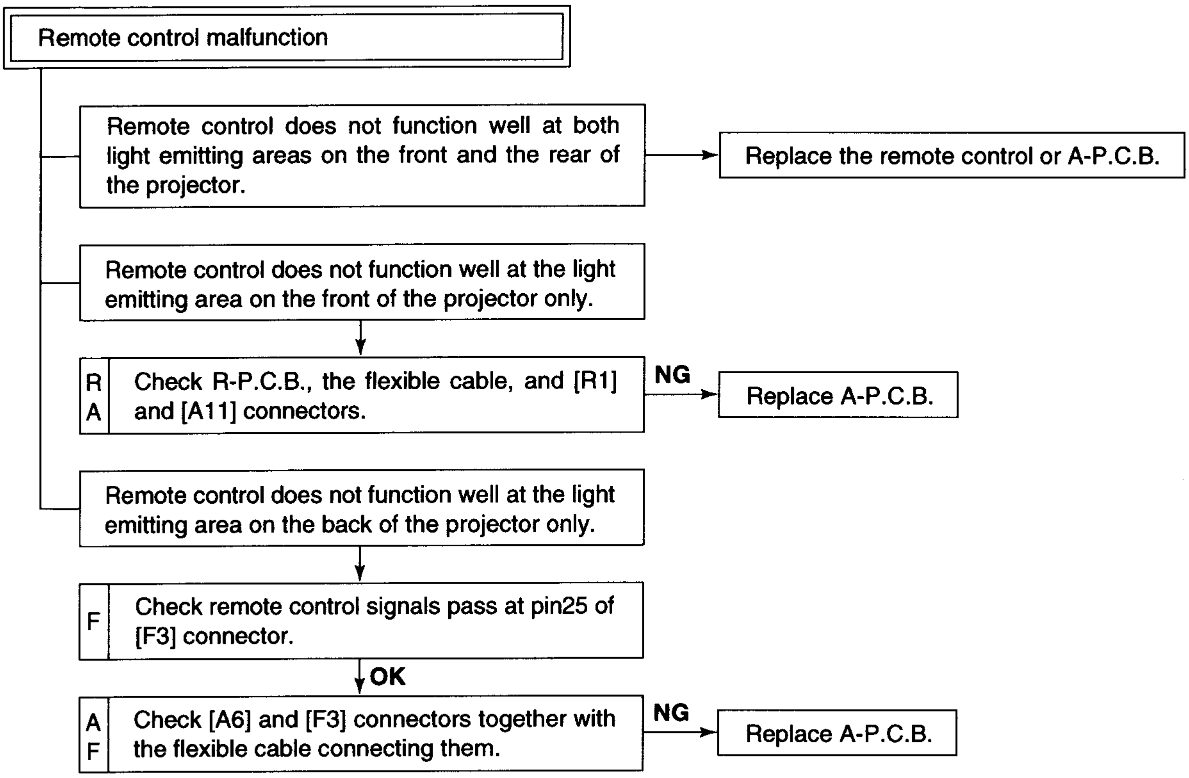
Go to the next page.

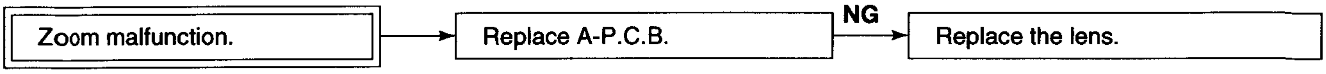

RGB input only is not displayed.
J
Check the output signals. See the J-1 .
NG
Step to J-2
OK
F
Check the output signals. See the F-6 .
NG
Step to F-4
Either RGB1 or RGB2 is not displayed.
Step to J-2
Either VIDEO IN or S-VIDEO IN is not displayed.
Step to J-2
Either R, G or B is not displayed or abnormally displayed.
F
Check the output signals. See the F-6 .
NG
J
Check the output signals. See the J-1 .
NG
Step to J-2
OK
Step to F-1
OK
D
Check the output signals. See the D-1 .
NG
D F
Check [D1] and [F8] connectors together with the flexible cable connecting them.
OK
Replace D-P.C.B.
NG
Replace A-P.C.B.
NG
Replace the bolck of LCD panel.
ON-SCREEN only is not displayed.
A
Check IC7002 and IC7003.

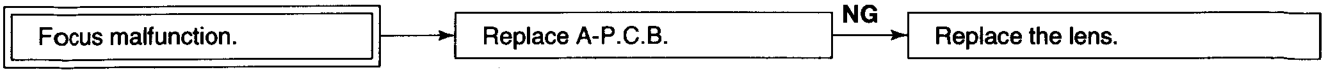

No sounds.
Is volume '0' or in the MUTE mode?
YES
Raise the volume or release MUTE.
NO
Are audio signal outputted from the AUDIO OUT terminal?
NO
J
Check IC7602 and IC7603.
YES
J
Are the audio signals at TPJ11 and TPJ12?
YES
A
Check the cable connecting [A15] connector.
OK
S
Check [S1] connector and S-P.C.B.
NO
J
Is there DC voltage at R7827?
YES
J
Check IC7801.
NO
J
Check L7801 and R7827.

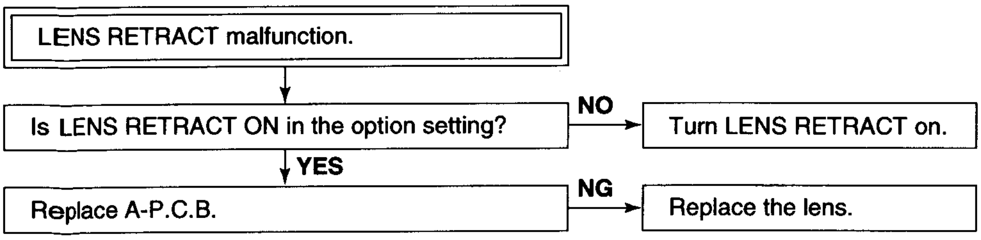

Malfunction of the key on the upper of the projector
A S
Check [A15] connector, the flexible cable connecting [A15] connector and S-P.C.B.


Mouse malfunction
Was the personal computer launched after connecting the mouse cable and turning on the power of projector?
NO
Turn off the power of the personal computer. Turn on the power of projector before launch the personal computer.
YES
Check the specification (PS/2 and serial, etc.) of the mouse for the personal computer.
NG
Provide a mouse applicable to the specification.
OK
J
Check from IC7701 to IC7704.

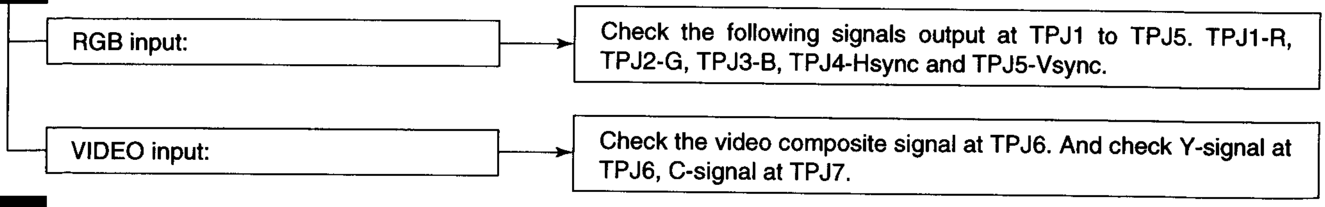

Remote control malfunction
Remote control does not function well at both light emitting areas on the front and the rear of the projector.
Replace the remote control or A-P.C.B.
Remote control does not function well at the light emitting area on the front of the projector only.
R
A
Check R-P.C.B., the flexible cable, and [R1] and [A11] connectors.
NG
Replace A-P.C.B.
Remote control does not function well at the light emitting area on the back of the projector only.
F
Check remote control signals pass at pin25 of [F3] connector.
OK
A
F
Check [A6] and [F3] connectors together with the flexible cable connecting them.
NG
Replace A-P.C.B.


Zoom malfunction.
Replace A-P.C.B.
NG
Replace the lens.


Focus malfunction.
Replace A-P.C.B.
NG
Replace the lens.


LENS RETRACT malfunction.
Is LENS RETRACT ON in the option setting?
NO
Turn LENS RETRACT on.
YES
Replace A-P.C.B.
NG
Replace the lens.

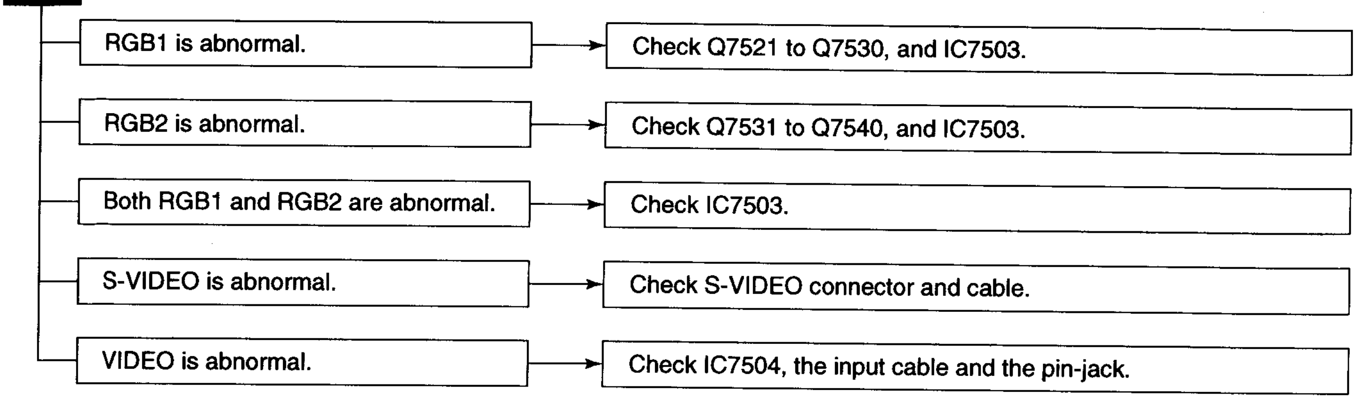
J-1



RGB input: → Check the following signals output at TPJ1 to TPJ5. TPJ1-R, TPJ2-G, TPJ3-B, TPJ4-Hsync and TPJ5-Vsync.

VIDEO input: → Check the video composite signal at TPJ6. And check Y-signal at TPJ6, C-signal at TPJ7.

J-2



RGB1 is abnormal. → Check Q7521 to Q7530, and IC7503.

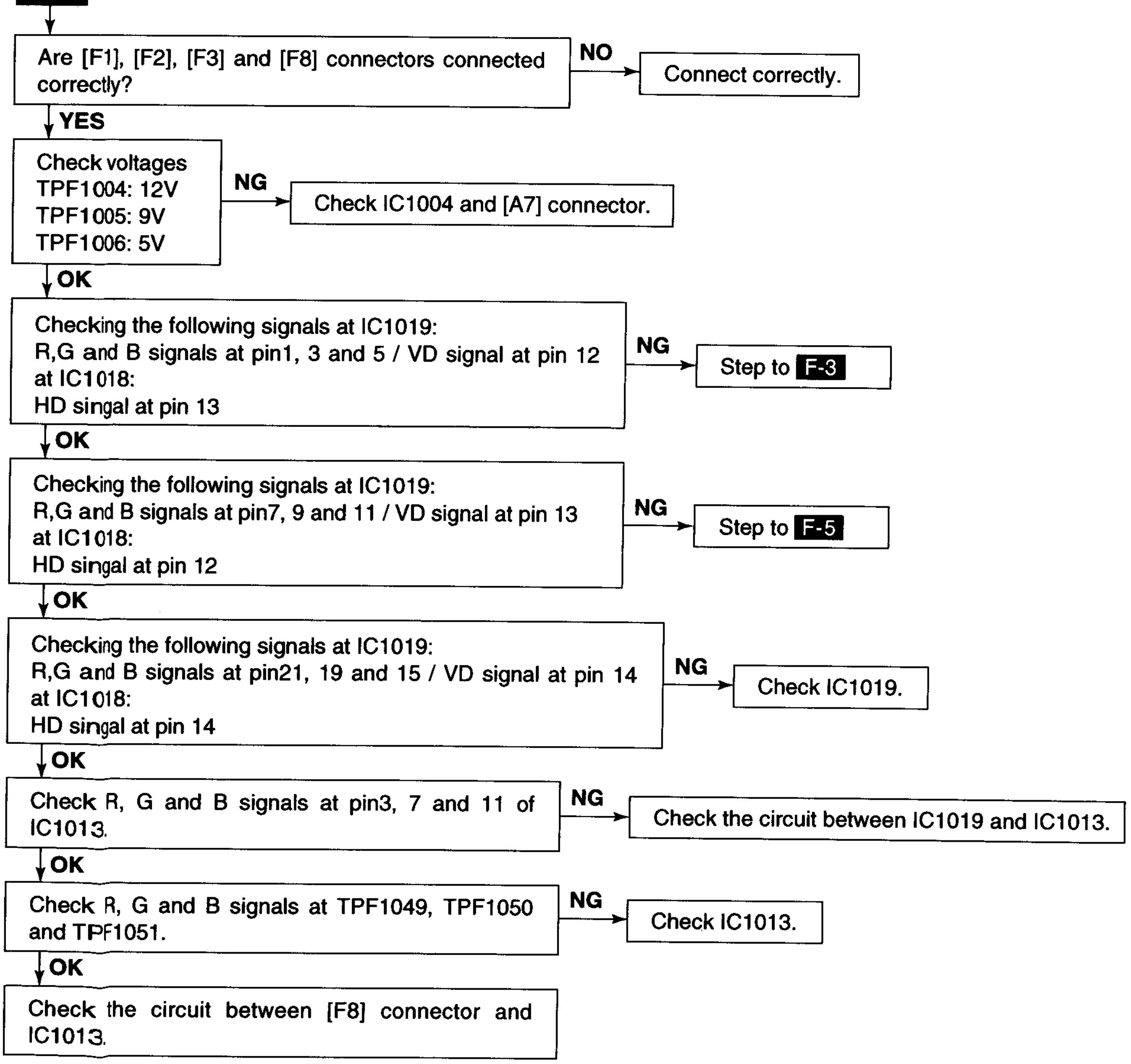
RGB2 is abnormal. → Check Q7531 to Q7540, and IC7503.

Both RGB1 and RGB2 are abnormal. → Check IC7503.

S-VIDEO is abnormal. → Check S-VIDEO connector and cable.

VIDEO is abnormal. → Check IC7504, the input cable and the pin-jack.

F-1



Are [F1], [F2], [F3] and [F8] connectors connected correctly?
- NO → Connect correctly.
- YES ↓

Check voltages
TPF1004: 12V
TPF1005: 9V
TPF1006: 5V
- NG → Check IC1004 and [A7] connector.
- OK ↓

Checking the following signals at IC1019:
R,G and B signals at pin1, 3 and 5 / VD signal at pin 12
at IC1018:
HD singal at pin 13
- NG → Step to F-3
- OK ↓

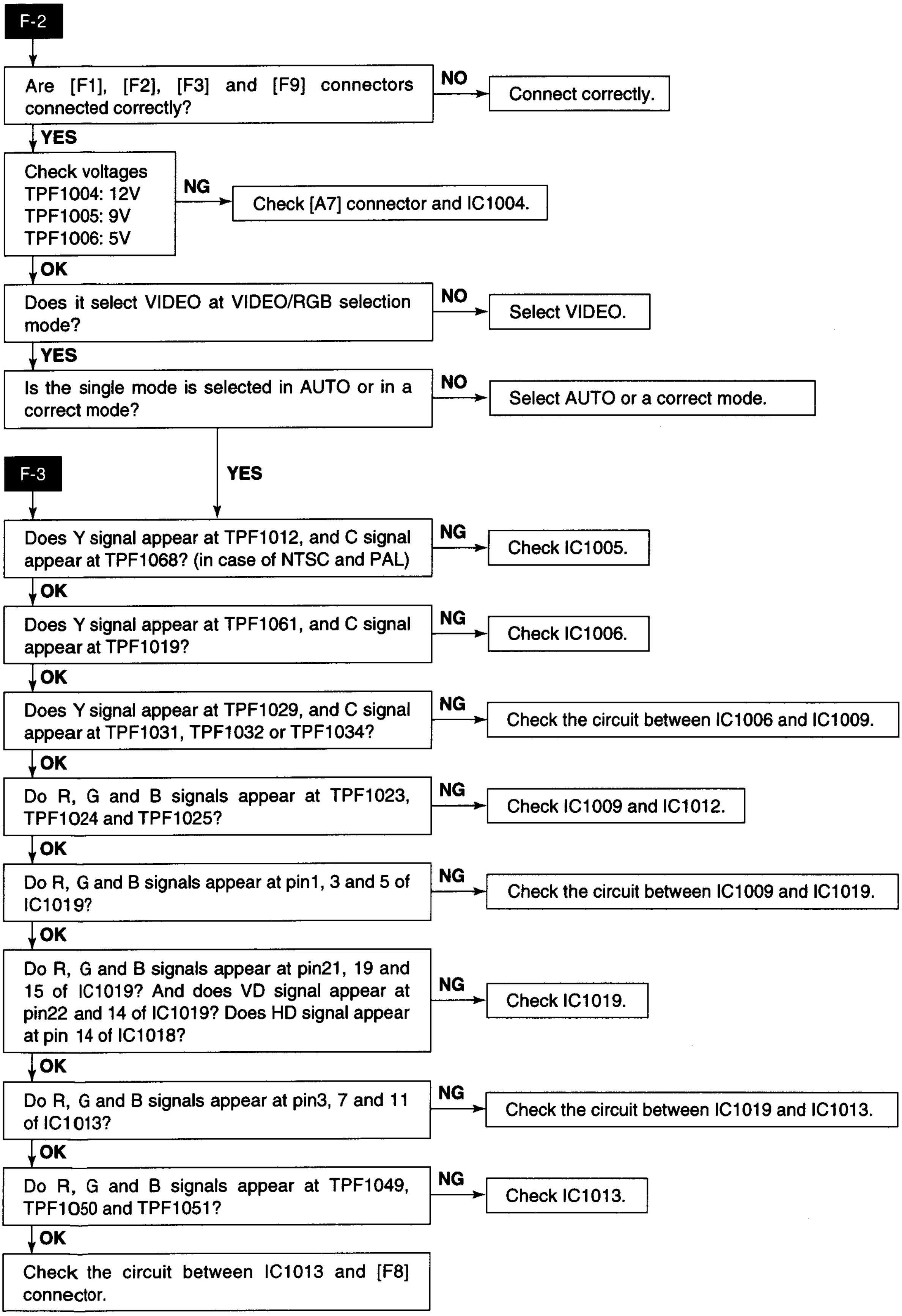
Checking the following signals at IC1019:
R,G and B signals at pin7, 9 and 11 / VD signal at pin 13
at IC1018:
HD singal at pin 12
- NG → Step to F-5
- OK ↓

Checking the following signals at IC1019:
R,G and B signals at pin21, 19 and 15 / VD signal at pin 14
at IC1018:
HD singal at pin 14
- NG → Check IC1019.
- OK ↓

Check R, G and B signals at pin3, 7 and 11 of IC1013.
- NG → Check the circuit between IC1019 and IC1013.
- OK ↓

Check R, G and B signals at TPF1049, TPF1050 and TPF1051.
- NG → Check IC1013.
- OK ↓

Check the circuit between [F8] connector and IC1013.



Are [F1], [F2], [F3] and [F9] connectors connected correctly?

NO → Connect correctly.

YES

Check voltages
TPF1004: 12V
TPF1005: 9V
TPF1006: 5V

NG → Check [A7] connector and IC1004.

OK

Does it select VIDEO at VIDEO/RGB selection mode?

NO → Select VIDEO.

YES

Is the single mode is selected in AUTO or in a correct mode?

NO → Select AUTO or a correct mode.

YES

Does Y signal appear at TPF1012, and C signal appear at TPF1068? (in case of NTSC and PAL)

NG → Check IC1005.

OK

Does Y signal appear at TPF1061, and C signal appear at TPF1019?

NG → Check IC1006.

OK

Does Y signal appear at TPF1029, and C signal appear at TPF1031, TPF1032 or TPF1034?

NG → Check the circuit between IC1006 and IC1009.

OK

Do R, G and B signals appear at TPF1023, TPF1024 and TPF1025?

NG → Check IC1009 and IC1012.

OK

Do R, G and B signals appear at pin1, 3 and 5 of IC1019?

NG → Check the circuit between IC1009 and IC1019.

OK

Do R, G and B signals appear at pin21, 19 and 15 of IC1019? And does VD signal appear at pin22 and 14 of IC1019? Does HD signal appear at pin 14 of IC1018?

NG → Check IC1019.

OK

Do R, G and B signals appear at pin3, 7 and 11 of IC1013?

NG → Check the circuit between IC1019 and IC1013.

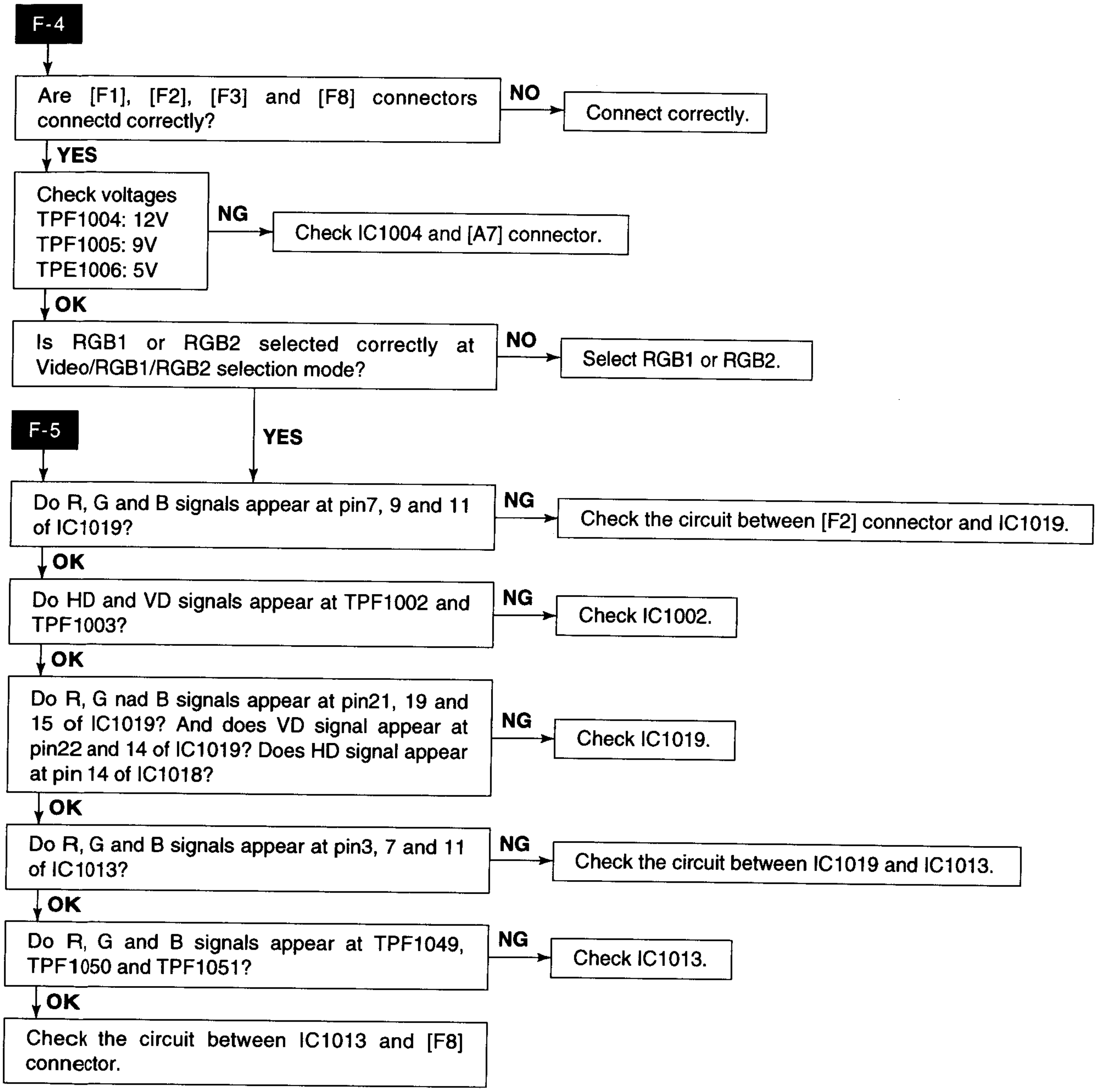
OK

Do R, G and B signals appear at TPF1049, TPF1050 and TPF1051?

NG → Check IC1013.

OK

Check the circuit between IC1013 and [F8] connector.


F-4
Are [F1], [F2], [F3] and [F8] connectors connectd correctly?
NO
Connect correctly.
YES
Check voltages
TPF1004: 12V
TPF1005: 9V
TPE1006: 5V
NG
Check IC1004 and [A7] connector.
OK
Is RGB1 or RGB2 selected correctly at Video/RGB1/RGB2 selection mode?
NO
Select RGB1 or RGB2.
F-5
YES
Do R, G and B signals appear at pin7, 9 and 11 of IC1019?
NG
Check the circuit between [F2] connector and IC1019.
OK
Do HD and VD signals appear at TPF1002 and TPF1003?
NG
Check IC1002.
OK
Do R, G nad B signals appear at pin21, 19 and 15 of IC1019? And does VD signal appear at pin22 and 14 of IC1019? Does HD signal appear at pin 14 of IC1018?
NG
Check IC1019.
OK
Do R, G and B signals appear at pin3, 7 and 11 of IC1013?
NG
Check the circuit between IC1019 and IC1013.
OK
Do R, G and B signals appear at TPF1049, TPF1050 and TPF1051?
NG
Check IC1013.
OK
Check the circuit between IC1013 and [F8] connector.

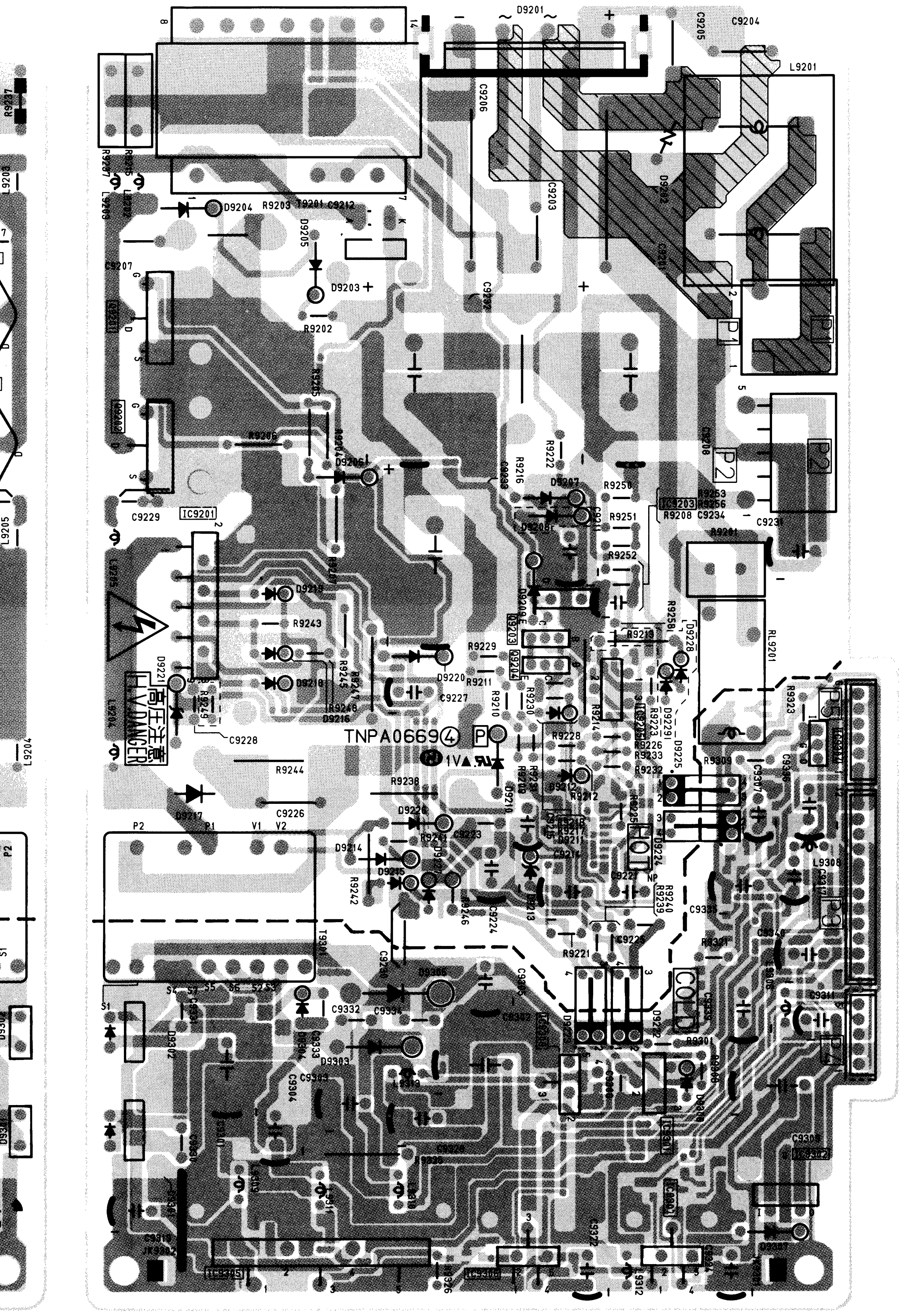
F-6

Check the signals, Red at TPF1057, Green at TPF1058, Blue at TPF1059, HD at TPF1009 and VD at TPF1146.

D-1

Check the signals, red at TPD12, blue at TPD10, green at TPD11, Hsync at TPD1 and Vsync at TPD2.

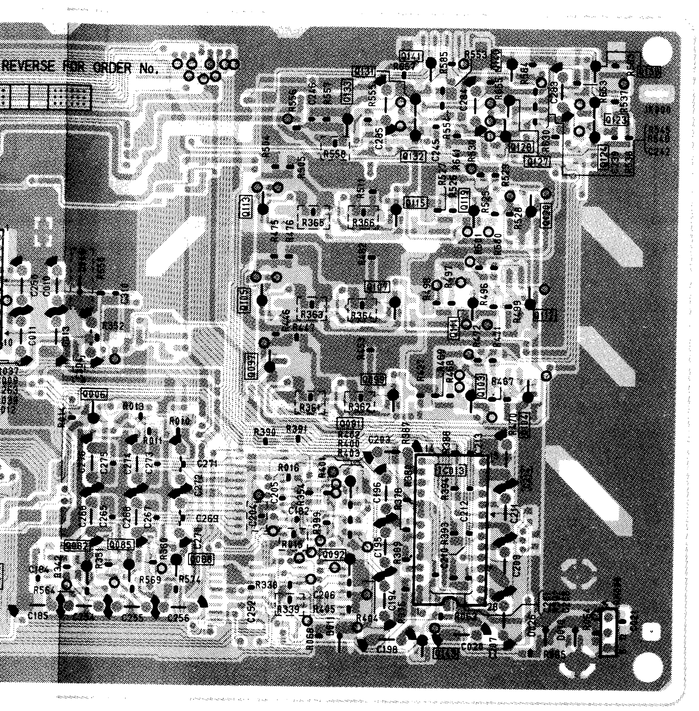
P–P.C. Board TNPA0669AB (Component Side)

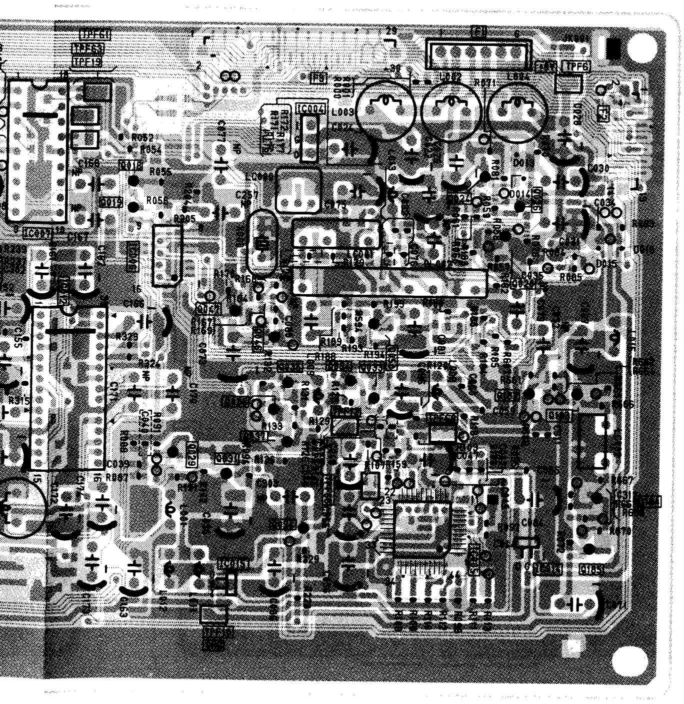

D9201
C9205
C9204
L9201
C9206
C9203
D9202
C9201
D9204
R9203
T9201
C9212
D9205
D9203
C9202
R9202
C9207
Q9201
Q9202
R9205
R9206
R9204
D9206
C9229
IC9201
R9216
C9209
R9222
D9207
D9208
R9250
IC9203
R9253
R9256
R9208
C9234
R9251
R9252
C9208
P2
P1
C9231
R9201
RL9201
D9219
R9243
D9218
R9245
R9248
D9216
C9228
TNPA0669④
D9220
C9227
R9229
R9211
R9210
R9230
Q9203
Q9204
R9228
R9214
D9228
R9923
R9244
R9238
D9217
C9226
P2
P1
V1
V2
D9214
D9215
R9242
D9226
C9223
R9246
C9224
D9213
D9225
R9309
R9233
R9232
R9226
D9224
C9227
R9240
R9239
HOT
COLD
T9301
C9301
C9330
L9306
C9330
C9332
C9334
D9303
C9303
C9304
D9302
R9221
R9301
D9310
C9311
C9309
C9312
D9307
IC9305
IC9306
IC9307
IC9308
IC9301
IC9304
C9322
JK9302
R9326

5
6
7
8
9

P-P.C. Board (Component Side)	
IC	
IC9201	D-6
IC9203	D-7
IC9205	C-7
IC9301	A-8
IC9302	A-8
IC9304	C-8
IC9305	A-6
IC9306	A-7
IC9307	A-8
IC9308	B-7
TRANSISTOR	
Q9201	E-5
Q9202	D-5
Q9203	C-7
Q9204	C-7

ADDRESS INFORMATION





F-P.C. Board (Foil Side and Component Side)

IC	
IC1000	A-3
IC1001	A-3
IC1002	B-3
IC1003	A-2
IC1004	C-6
IC1005	A-6
IC1006	B-5
IC1007	B-5
IC1009	A-4
IC1010	B-4
IC1011	B-4
IC1012	B-5
IC1013	A-1
IC1015	B-3
IC1018	A-2
IC1019	A-2
IC1020	A-3
IC1021	B-1

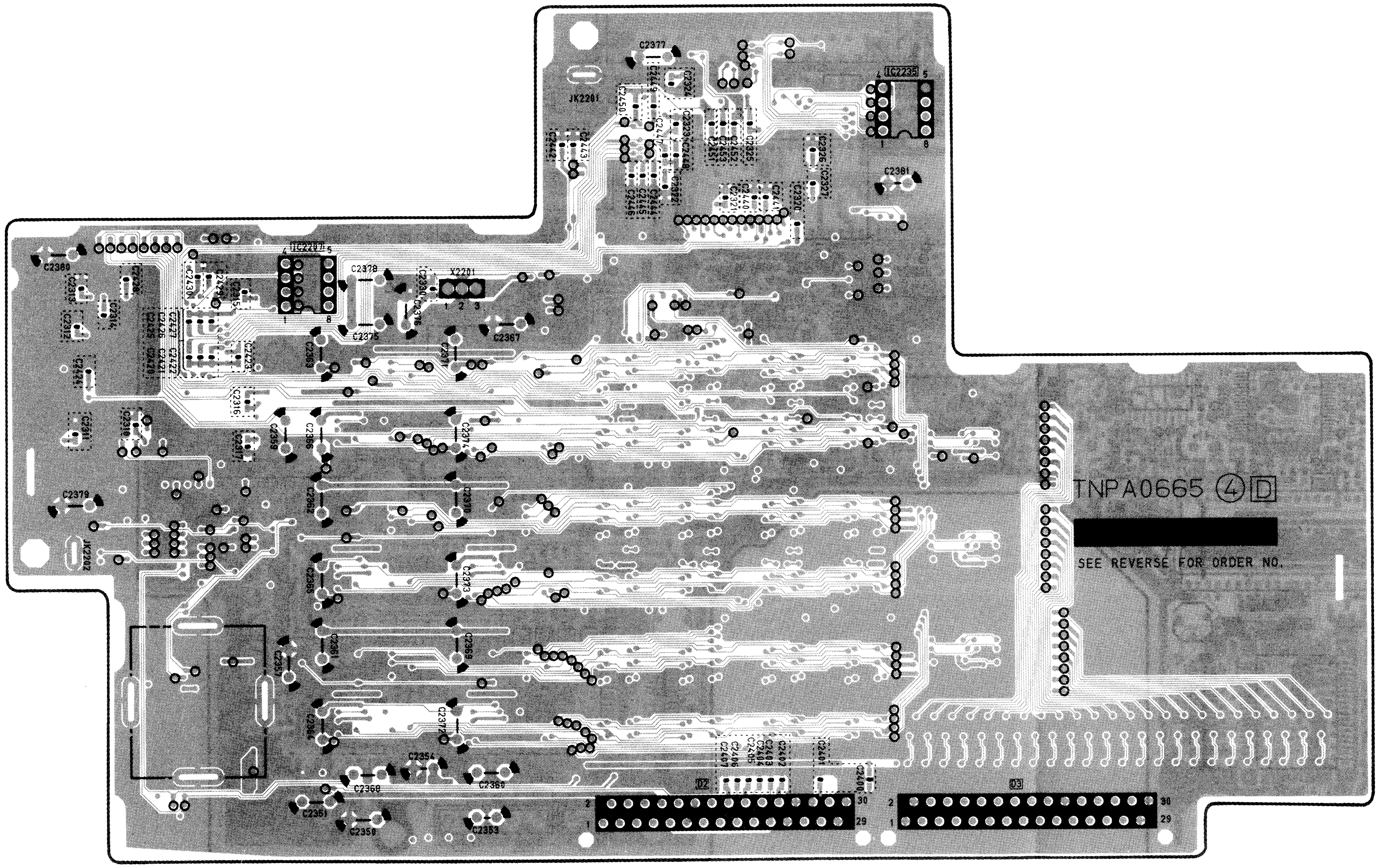
TRANSISTOR	
Q1003	B-2
Q1004	B-2
Q1005	B-3
Q1006	D-5
Q1007	A-1
Q1008	A-1
Q1009	D-7
Q1010	B-1
Q1011	A-1
Q1012	A-1
Q1013	D-7
Q1014	B-1
Q1015	A-1
Q1015	E-6
Q1016	A-1
Q1017	D-7
Q1018	B-5
Q1019	B-5
Q1020	B-6
Q1021	E-1
Q1024	B-6
Q1025	E-1
Q1026	B-7
Q1028	E-1
Q1029	A-5
Q1030	D-2
Q1031	A-5
Q1033	B-6
Q1034	B-6
Q1035	B-6
Q1036	B-6
Q1037	A-6
Q1039	B-6
Q1040	A-7
Q1041	A-7
Q1042	D-1
Q1043	D-2
Q1044	D-2
Q1045	E-2
Q1046	B-6
Q1047	B-5
Q1048	E-2
Q1049	E-2
Q1050	B-6
Q1051	E-1
Q1052	E-2
Q1054	A-6
Q1055	E-3
Q1056	B-5
Q1057	B-4
Q1058	D-3
Q1059	D-3
Q1060	B-4
Q1061	D-4
Q1062	D-3
Q1063	A-4
Q1065	B-2
Q1066	D-4
Q1067	C-4
Q1072	A-5
Q1073	A-5
Q1074	A-5
Q1075	A-3
Q1076	A-3
Q1077	D-3
Q1078	D-3
Q1079	A-5
Q1080	B-1
Q1082	D-5
Q1083	B-2
Q1084	A-3
Q1085	D-5
Q1086	B-2
Q1087	A-3
Q1088	D-5
Q1090	A-2
Q1091	D-6
Q1092	D-6
Q1093	E-1
Q1097	E-6
Q1098	B-2
Q1099	D-6
Q1100	B-2
Q1101	B-1
Q1102	B-1
Q1103	E-6
Q1104	D-6
Q1106	B-2
Q1107	E-6
Q1108	B-2
Q1109	B-1
Q1110	B-1
Q1111	E-6
Q1112	E-7
Q1113	E-6
Q1114	B-2
Q1115	E-6
Q1116	B-2
Q1117	B-1
Q1118	B-1
Q1119	E-6
Q1120	E-7
Q1121	E-6
Q1122	C-1
Q1123	E-7
Q1124	E-7
Q1125	E-6
Q1126	C-1
Q1127	F-6
Q1128	E-6
Q1129	E-7
Q1130	B-2
Q1131	F-6
Q1132	E-6
Q1133	F-6
Q1134	D-1
Q1135	D-5
Q1136	A-2
Q1137	A-2
Q1138	A-2
Q1139	F-7
Q1140	F-6
Q1141	F-6
Q1143	D-6
Q1147	B-2
Q1148	B-2
Q1149	B-2
Q1181	B-1

TP	
TPF1000	A-3
TPF1001	A-3
TPF1002	B-3
TPF1003	B-2
TPF1004	B-3
TPF1005	B-4
TPF1006	C-7
TPF1009	C-2
TPF1010	A-5
TPF1012	B-6
TPF1019	C-5
TPF1022	A-3
TPF1023	B-4
TPF1024	B-4
TPF1025	B-4
TPF1026	A-3
TPF1029	B-4
TPF1030	C-4
TPF1031	B-5
TPF1032	B-4
TPF1034	A-4
TPF1035	A-3
TPF1036	A-4
TPF1038	A-4
TPF1039	A-4
TPF1040	A-4
TPF1041	A-3
TPF1048	A-2
TPF1049	B-2
TPF1050	B-2
TPF1051	B-2
TPF1057	C-1
TPF1058	C-1
TPF1059	C-1
TPF1061	C-5
TPF1063	C-5
TPF1064	B-3
TPF1065	A-6
TPF1067	B-3
TPF1068	B-6
TPF1146	C-2

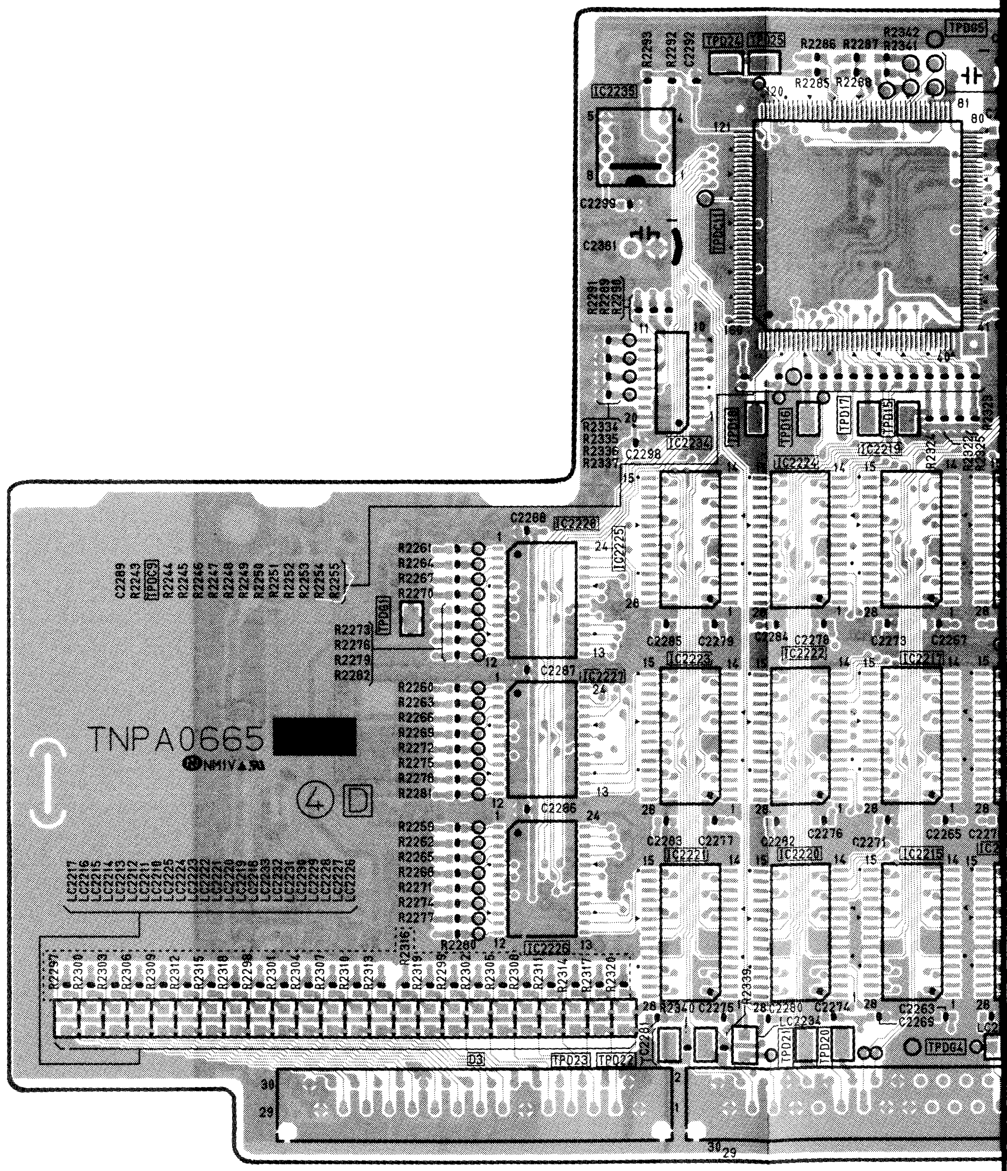
ADDRESS INFORMATION

5 6 7 8 9

D–P.C. Board TNPA0665AC
(Foil Side)


JK2201
IC2235
IC2207
X2201
C2377
C2381
C2380
C2379
C2378
C2375
C2367
JK2202
C2368
C2369
C2354
C2351
C2353
C2350
D2
D3
TNPA0665 ④D
SEE REVERSE FOR ORDER NO.
1
2
29
30

D–P.C. Board TNPA0665AC
(Component Side)


IC2235
TNPA0665
④D
D3
TPD23
TPD22
TPD64
IC2223
IC2228
IC2221
IC2220
IC2219
29
30

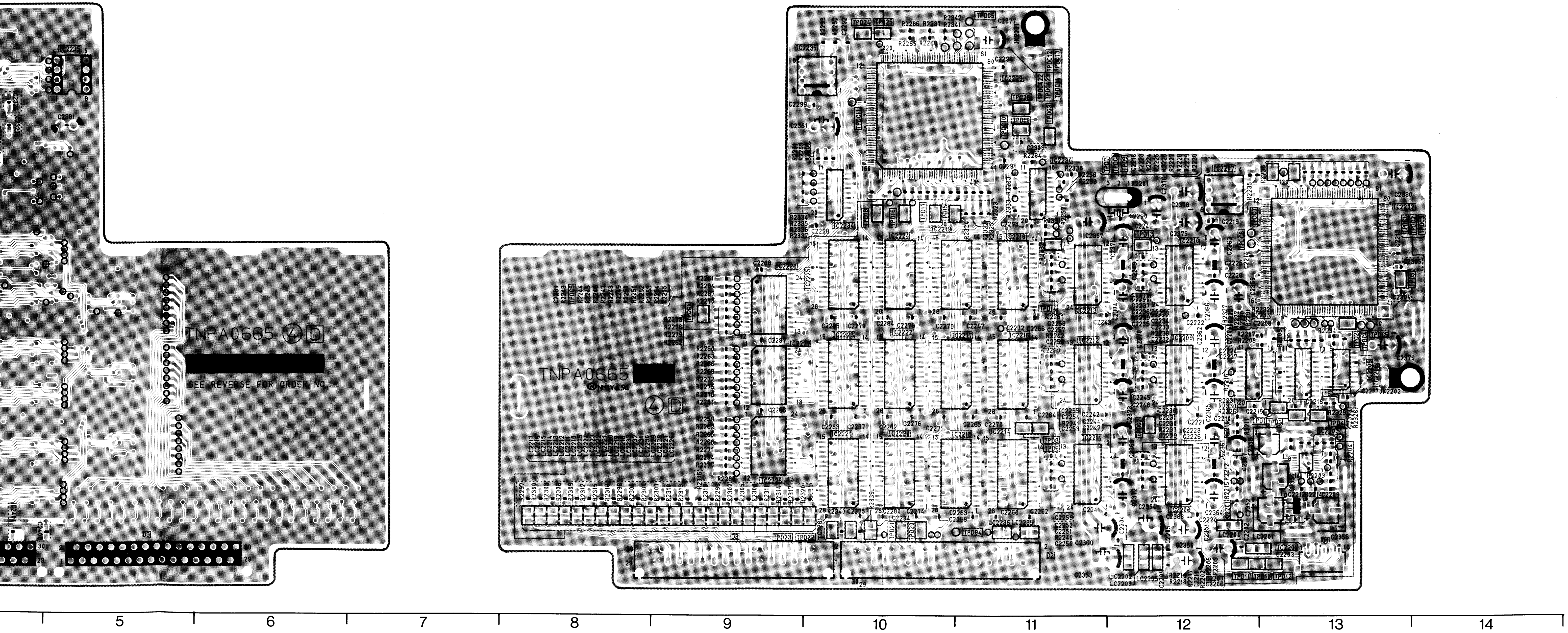
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

D-P.C. Board (Component Side)

IC		IC2222	B-10	TPD6	B-11	TPDC1	C-13
IC2201	A-13	IC2223	B-10	TPD7	C-12	TPDC2	C-14
IC2202	C-13	IC2224	C-10	TPD8	B-11	TPDC3	C-14
IC2204	B-12	IC2225	C-10	TPD9	C-12	TPDC4	B-13
IC2205	B-13	IC2226	A-9	TPD10	A-13	TPDC5	B-13
IC2206	B-13	IC2227	B-9	TPD11	A-12	TPDC6	C-12
IC2207	C-12	IC2228	C-9	TPD12	A-13	TPDC7	C-12
IC2208	A-12	IC2229	D-11	TPD13	C-12	TPDC8	C-12
IC2209	B-12	IC2230	C-11	TPD14	B-11	TPDC9	C-8
IC2210	C-12	IC2234	C-10	TPD15	C-10	TPDC10	D-11
IC2211	B-11	IC2235	D-10	TPD16	C-10	TPDC11	D-10
IC2212	B-11	TRANSISTOR		TPD17	C-10	TPDC12	D-11
IC2213	B-11			TPD18	C-10	TPDC13	D-11
IC2214	B-11	Q2201	A-12	TPD19	D-11	TPDC14	D-11
IC2215	B-11			TPD20	A-10	TPDC422	D-11
IC2216	B-11	TP		TPD21	A-10	TPDC423	D-11
IC2217	B-11	TPD1	B-13	TPD22	A-10	TPDG1	B-9
IC2218	C-11	TPD2	B-13	TPD23	A-9	TPDG2	B-12
IC2219	C-10	TPD3	B-13	TPD24	D-10	TPDG3	D-11
IC2220	B-10	TPD4	B-13	TPD25	D-10	TPDG4	A-11
IC2221	B-10	TPD5	C-13	TPD26	D-11	TPDG5	D-11

ADDRESS INFORMATION

D–P.C. Board TNPA0665AC (Component Side)

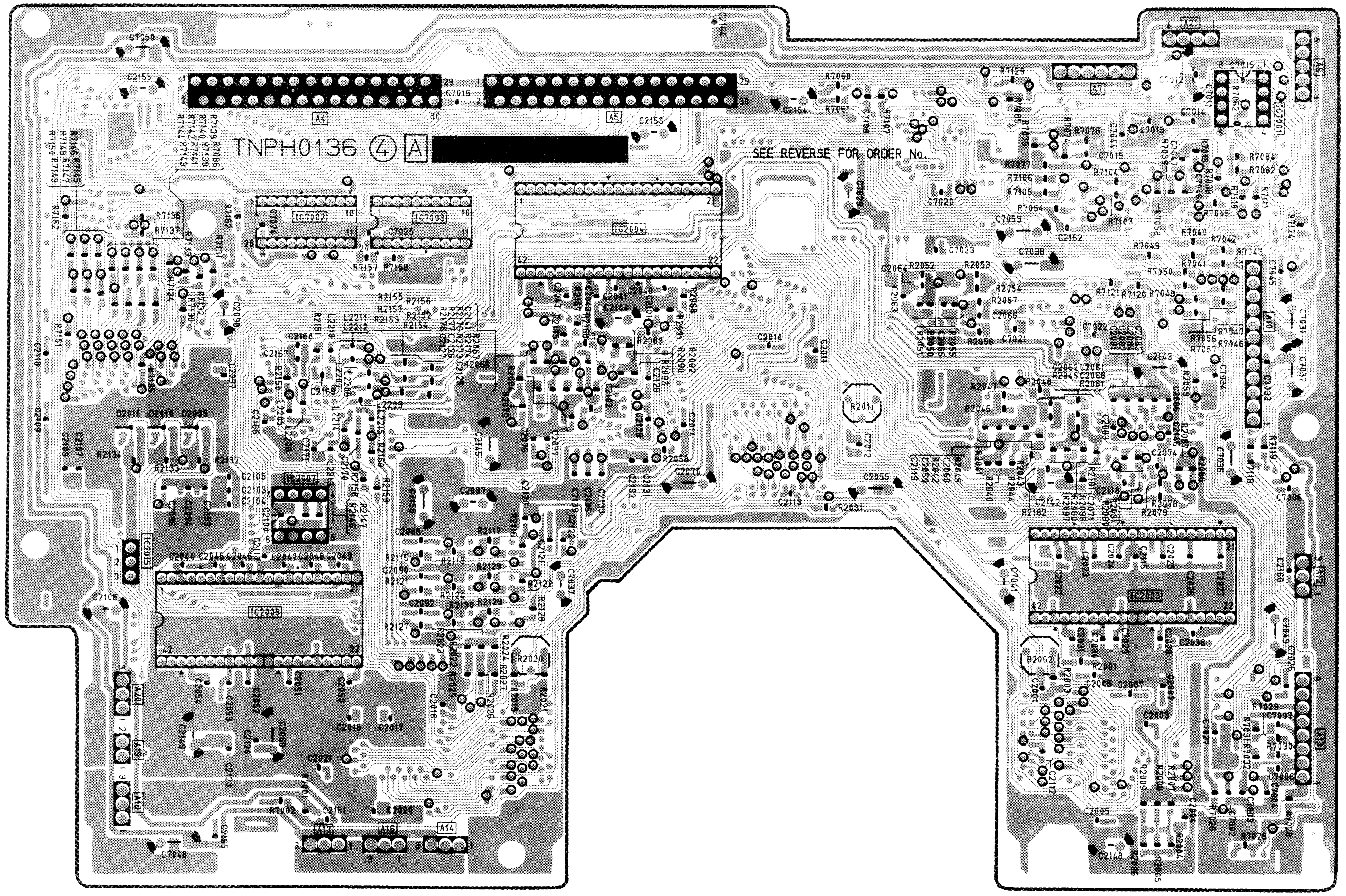

TNPA0665 ④D
SEE REVERSE FOR ORDER NO.
TNPA0665
④D
IC2235
IC2229
IC2207
IC2228
IC2224
IC2219
IC2218
IC2222
IC2217
IC2216
IC2209
IC2221
IC2220
IC2215
IC2214
IC2211
IC2226
IC2201
JK2201
JK2202
X2201
5
6
7
8
9
10
11
12
13
14

A-P.C. Board (Foil Side)

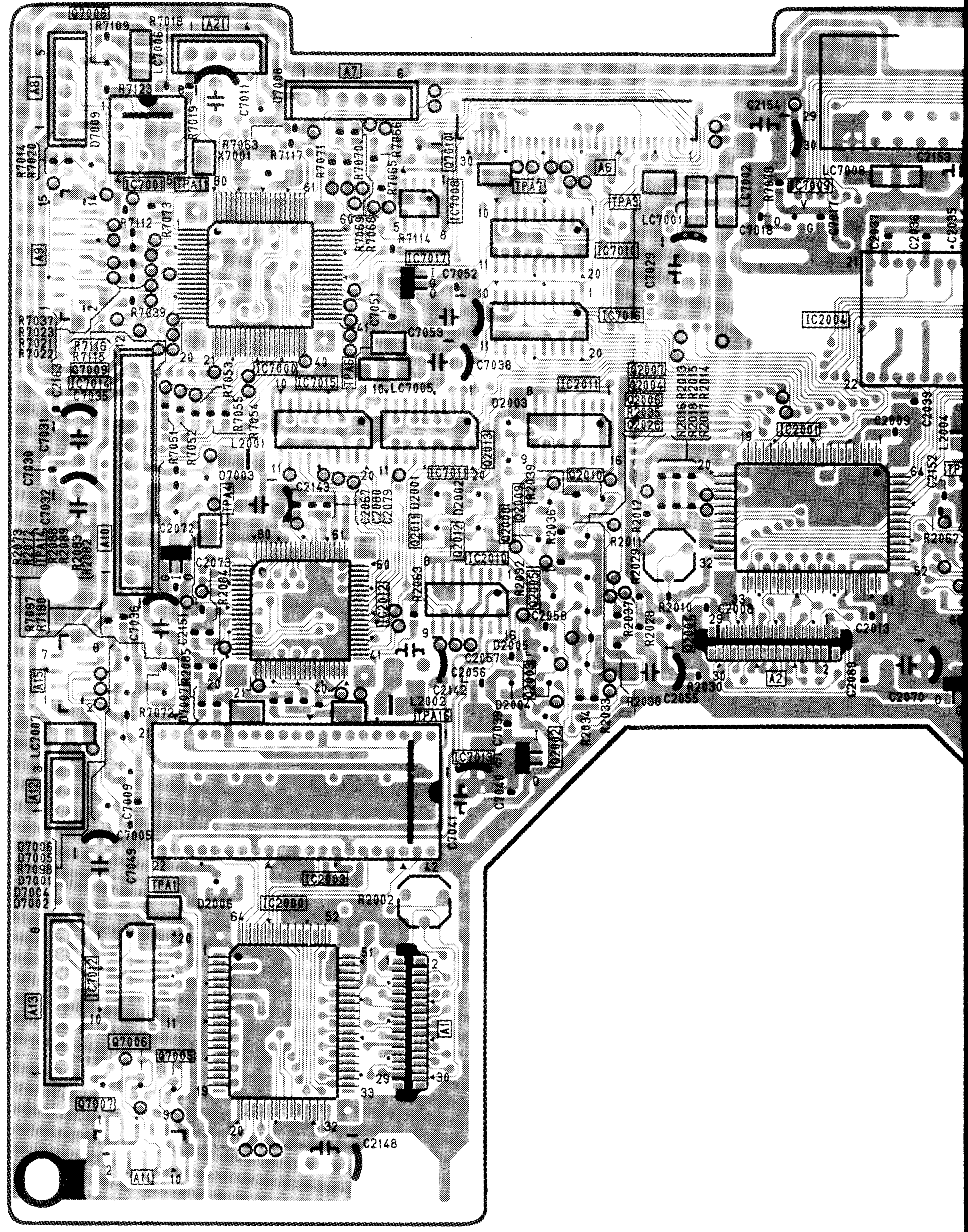
IC	
IC2003	B-6
IC2004	D-4
IC2005	B-2
IC2007	B-2
IC7001	D-6
IC7002	D-2
IC7003	D-3

ADDRESS INFORMATION

A–P.C. Board TNPH0136AD (Foil Side)


TNPH0136 ④ A
SEE REVERSE FOR ORDER No.
IC2003
IC2004
IC2005
IC2007
IC7002
IC7003

A–P.C. Board TNPH0136AD (Component Side)



IC
IC2000
IC2001
IC2002
IC2003
IC2004
IC2005
IC2006
IC2007
IC2008
IC2009
IC2010
IC2011
IC2012
IC2013
IC2014
IC2015
IC7000
IC7001

ADDRESS INFOR

A-P.C. Board (Component Side)

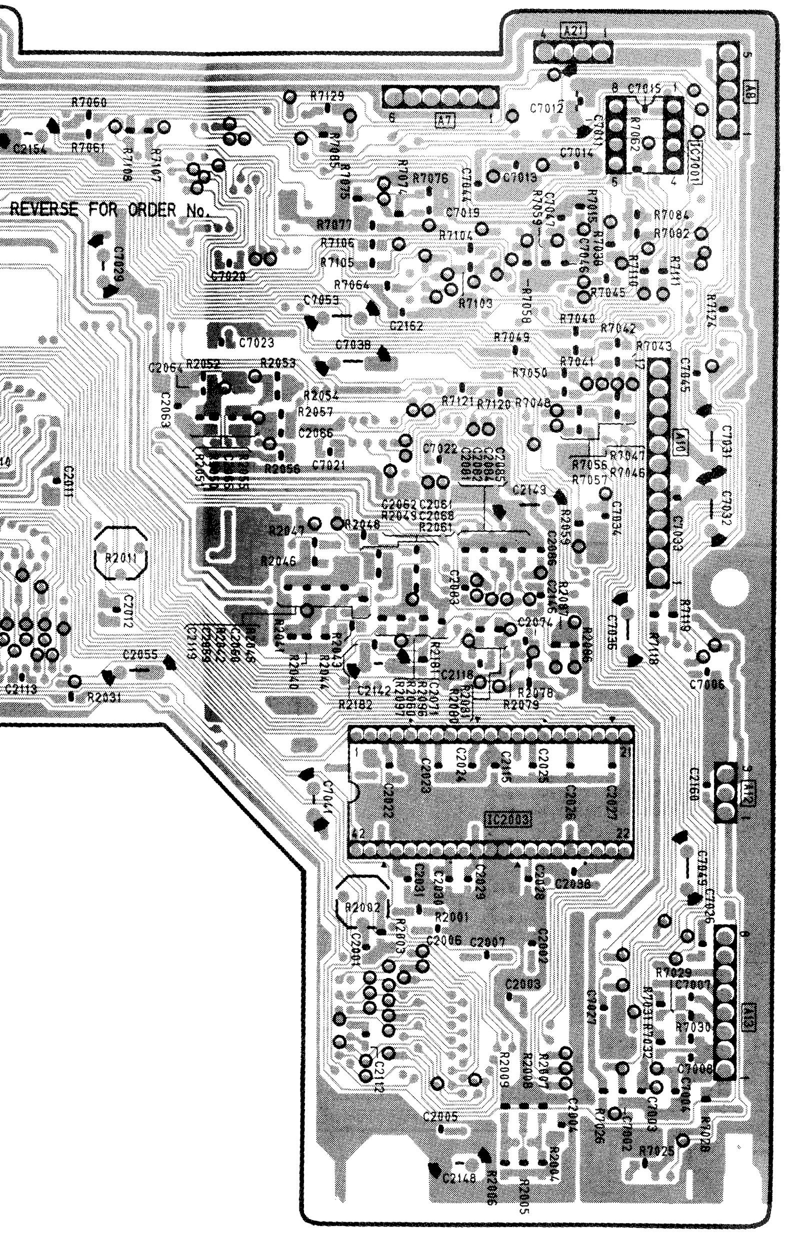
IC			
IC2000	B-8	IC7002	D-13
IC2001	C-10	IC7003	D-11
IC2002	A-12	IC7004	D-13
IC2003	B-9	IC7006	D-13
IC2004	D-10	IC7007	D-11
IC2005	B-13	IC7008	D-9
IC2006	C-11	IC7009	D-10
IC2007	B-12	IC7010	D-10
IC2008	C-12	IC7011	C-9
IC2009	C-13	IC7012	A-8
IC2010	C-9	IC7013	B-9
IC2011	C-9	IC7014	C-8
IC2012	C-9	IC7015	C-9
IC2013	B-11	IC7016	D-10
IC2014	A-13	IC7017	D-9
IC2015	B-13		
IC7000	C-8		
IC7001	D-8		

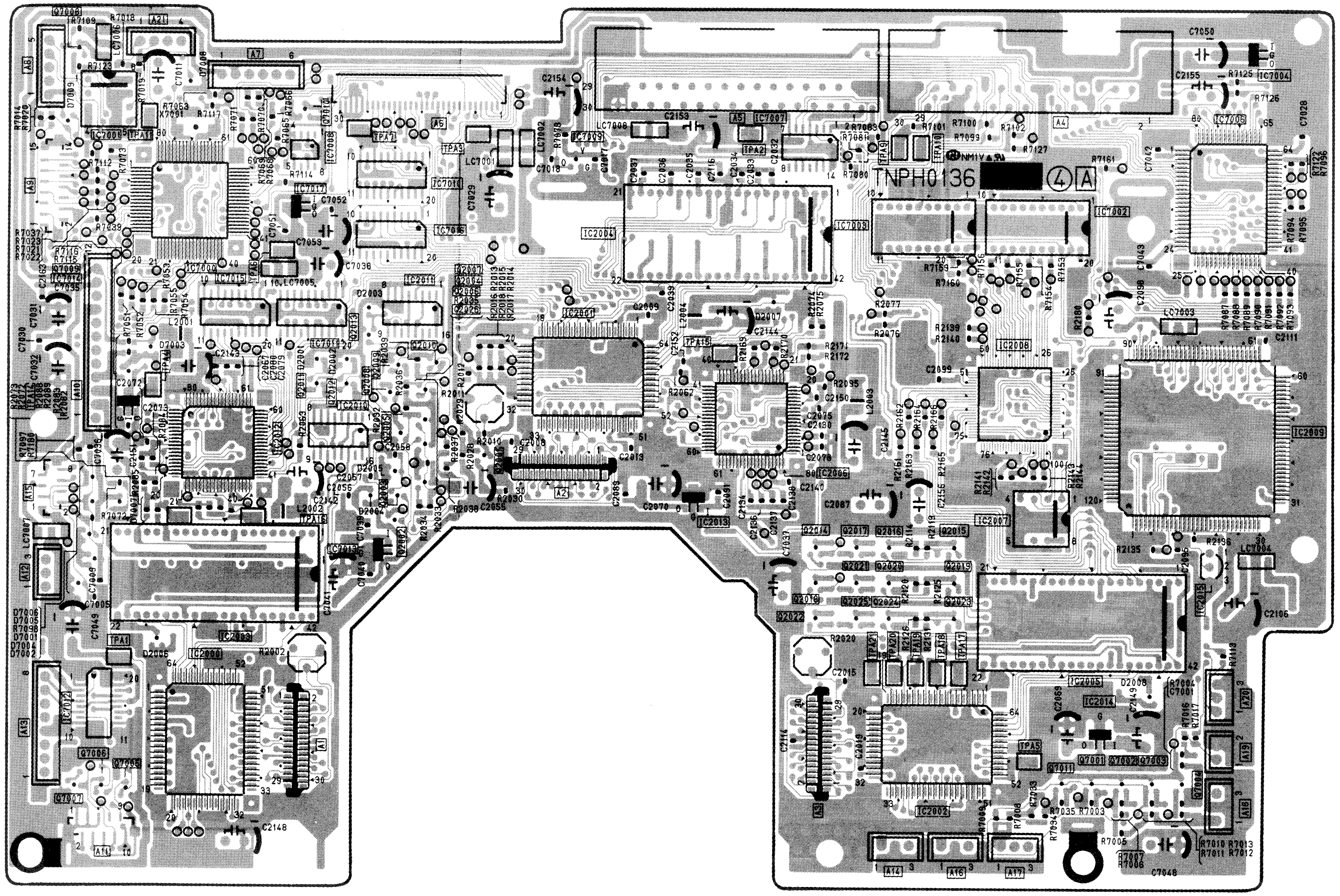
TRANSISTOR					
Q2001	C-10	Q2003	B-9	Q2022	B-11
Q2002	B-9	Q2004	C-10	Q2023	B-12
		Q2005	C-9	Q2024	B-12
		Q2006	C-10	Q2025	B-11
		Q2007	C-10	Q2026	C-10
		Q2008	C-9	Q7001	A-13
		Q2009	C-9	Q7002	A-13
		Q2010	C-9	Q7003	A-13
		Q2011	C-9	Q7004	A-13
		Q2012	C-9	Q7005	A-8
		Q2013	C-9	Q7006	A-8
		Q2014	B-11	Q7007	A-8
		Q2015	B-12	Q7008	E-8
		Q2016	B-12	Q7009	C-8
		Q2017	B-11	Q7010	D-9
		Q2018	B-11	Q7011	A-12
		Q2019	B-12		
		Q2020	B-12		
		Q2021	B-11		

TP	
TPA1	B-8
TPA2	D-11
TPA3	D-10
TPA4	C-8
TPA5	A-12
TPA6	C-9
TPA7	D-9
TPA9	D-12
TPA10	D-12
TPA11	D-8
TPA14	C-8
TPA15	C-11
TPA16	B-9
TPA17	B-12
TPA18	B-12
TPA19	B-12
TPA20	B-12
TPA21	B-12

ADDRESS INFORMATION

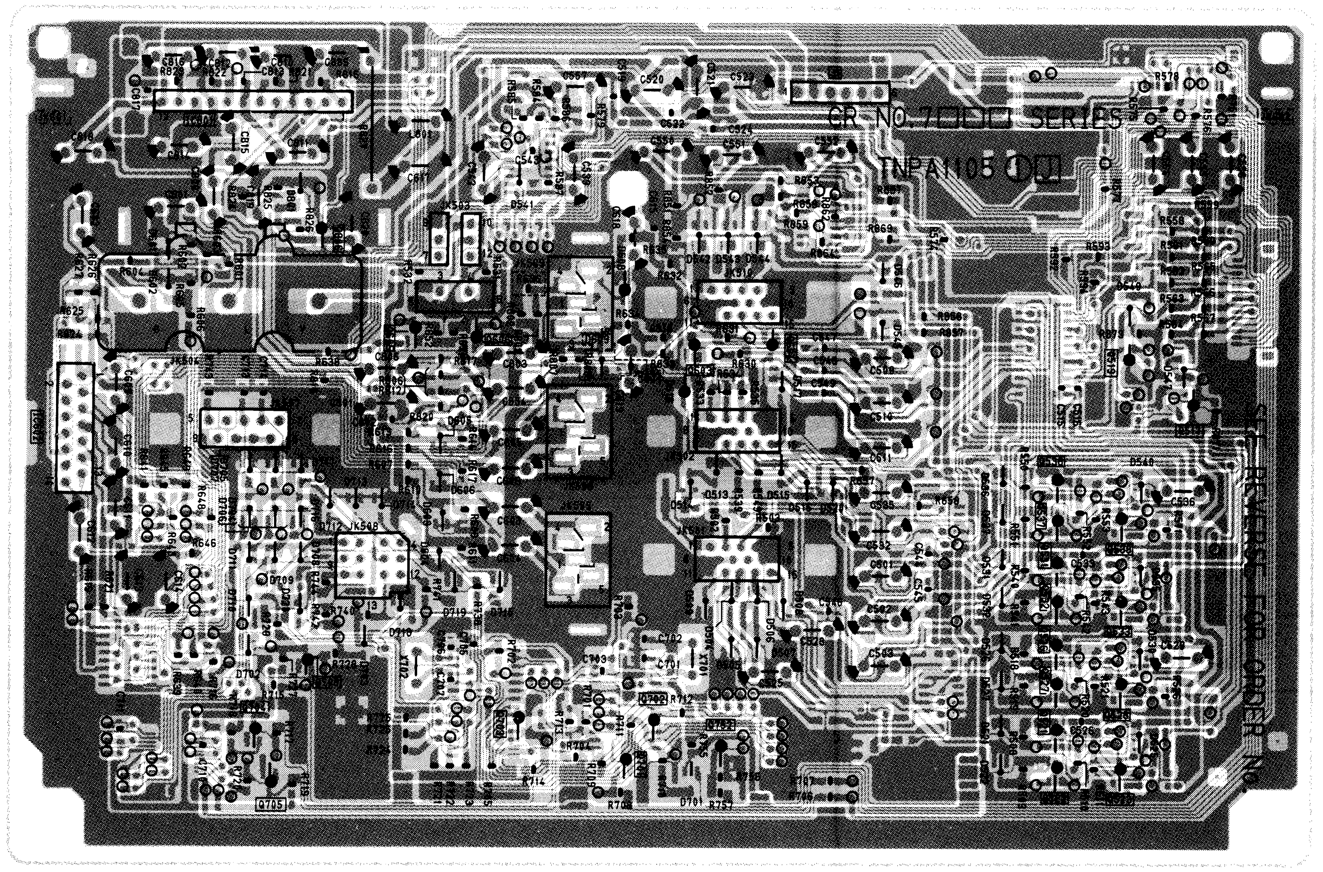
A–P.C. Board TNPH0136AD (Component Side)


REVERSE FOR ORDER No.
A21
A7
A8
A10
A13
IC2003
R2011
C2148


TNPH0136 ④ A
IC2000
IC2001
IC2002
IC2003
IC2004
IC2005
IC2006
IC2007
IC2008
IC2009
IC2010
IC2011
IC2012
IC2013
IC2014
IC7000
IC7002
IC7003
IC7004
IC7005
IC7006
IC7007
IC7008
IC7009
IC7010
IC7011
IC7012
IC7013
IC7014
IC7015
IC7016
IC7017
TPA1
TPA2
TPA3
TPA5
TPA7
A1
A2
A4
A5
A6
A7
A9
A14
A15
A16
A17
A18
A19
A20
A21
C7050
C2155
C2154
C2153
C2106
C2148
C7048

5 6 7 8 9 10 11 12 13 14

J-P.C. Board TXN/J1VHP4
(Foil Side)



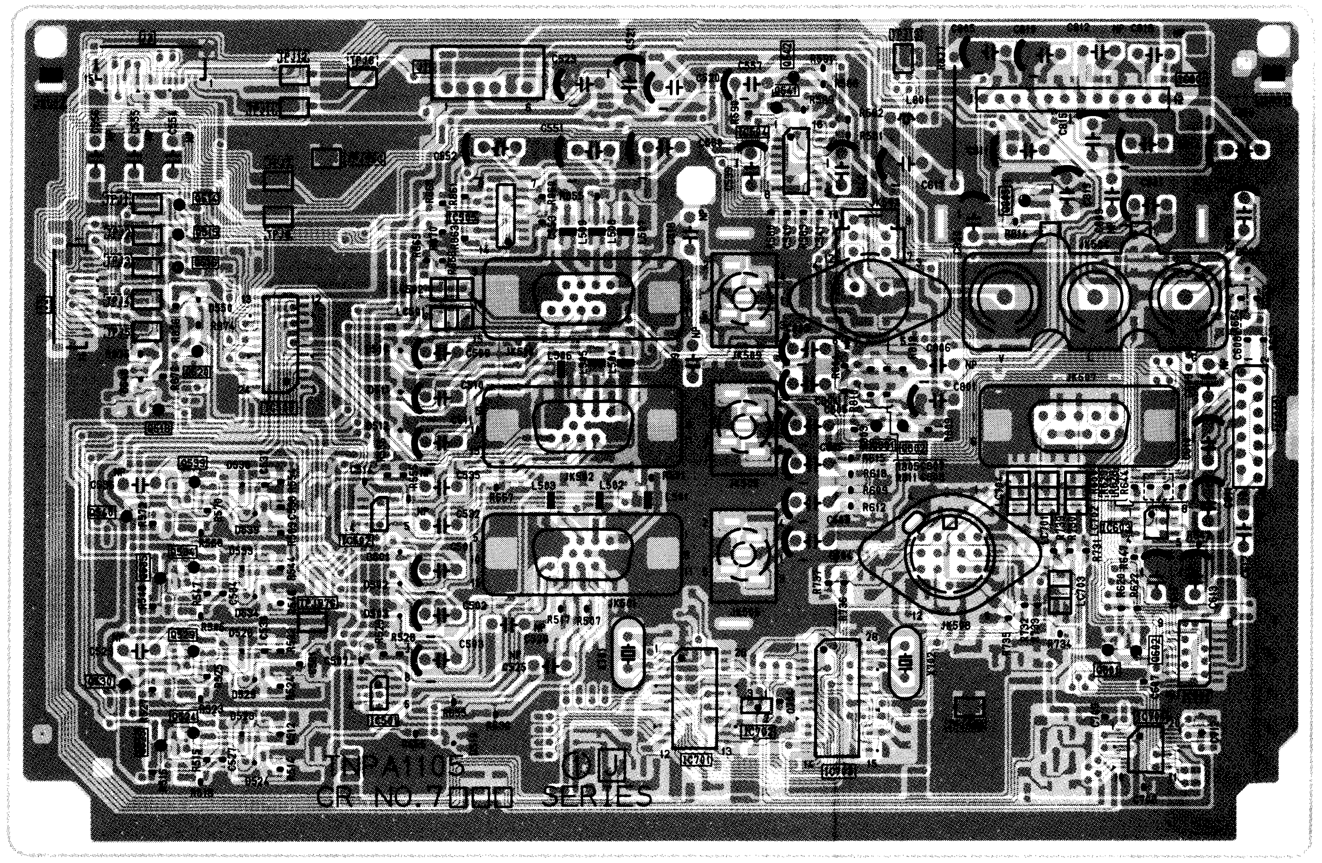
J-P.C. Board (Foil Side)

IC	
IC7602	E-3
IC7801	F-3

TRANSISTOR	
Q7517	E-6
Q7519	E-6
Q7521	D-6
Q7522	D-6
Q7523	D-6
Q6526	D-6
Q7527	D-6
Q7528	D-6
Q7531	E-6
Q7532	D-6
Q7533	D-6
Q7536	E-6
Q7537	E-6
Q7538	E-6
Q7603	D-4
Q7604	D-3
Q7605	E-4
Q7606	E-4
Q7701	D-5
Q7702	D-5
Q7703	D-4
Q7704	D-3
Q7705	D-3
Q7706	D-3
Q7752	D-5
Q7806	F-3

ADDRESS INFORMATION

J-P.C. Board TXN/J1VHP4
(Component Side)



J-P.C. Board (Component Side)

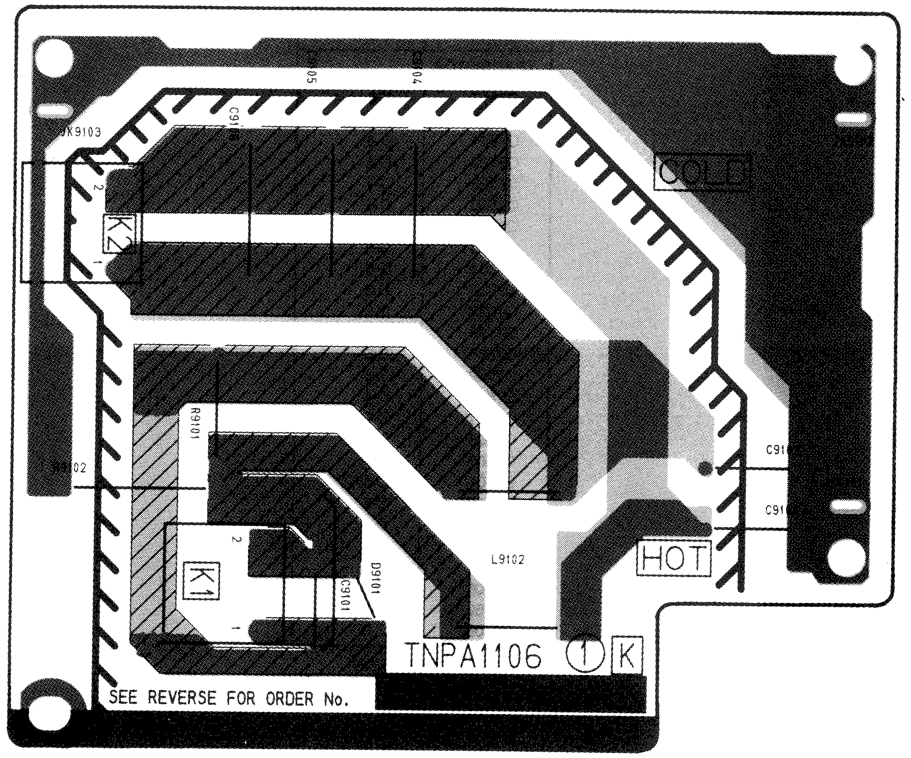
IC	
IC7501	A-4
IC7502	B-4
IC7503	B-3
IC7504	C-5
IC7505	C-4
IC7601	A-6
IC7602	B-7
IC7701	A-5
IC7702	A-5
IC7703	A-5
IC7704	A-6
IC7801	C-6

TRANSISTOR	
Q7514	C-3
Q7515	C-3
Q7516	C-3
Q7518	B-3
Q7520	B-3
Q7524	A-3
Q7525	A-3
Q7529	A-3
Q7530	A-3
Q7534	B-3
Q7535	B-3
Q7539	B-3
Q7540	B-3
Q7541	C-5
Q7542	C-5
Q7601	A-6
Q7602	A-6
Q7801	B-5
Q7802	B-5
Q7805	C-6

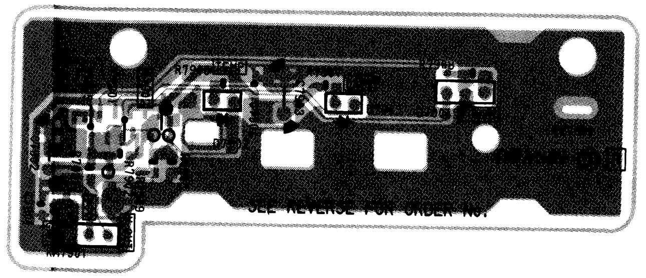
TP	
TPJ1	C-3
TPJ2	C-3
TPJ3	C-3
TPJ4	B-3
TPJ5	B-3
TPJ6	C-3
TPJ7	C-3
TPJ8	C-4
TPJ11	C-5
TPJ12	C-3
TPJ13	C-5
TPJ95G	C-4
TPJ96G	A-6
TPJ97G	A-4

ADDRESS INFORMATION

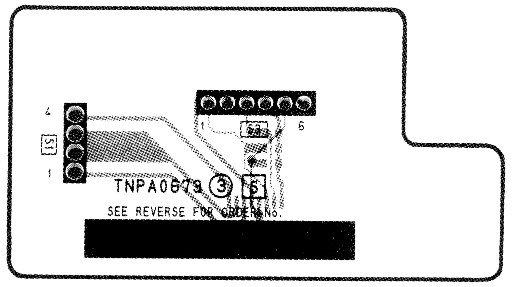
K–P.C. Board TNPA1106AA (Foil Side)


K9103
COLD
K2
R9101
R9102
K1
C9101
D9101
L9102
HOT
TNPA1106 ① K
SEE REVERSE FOR ORDER No.

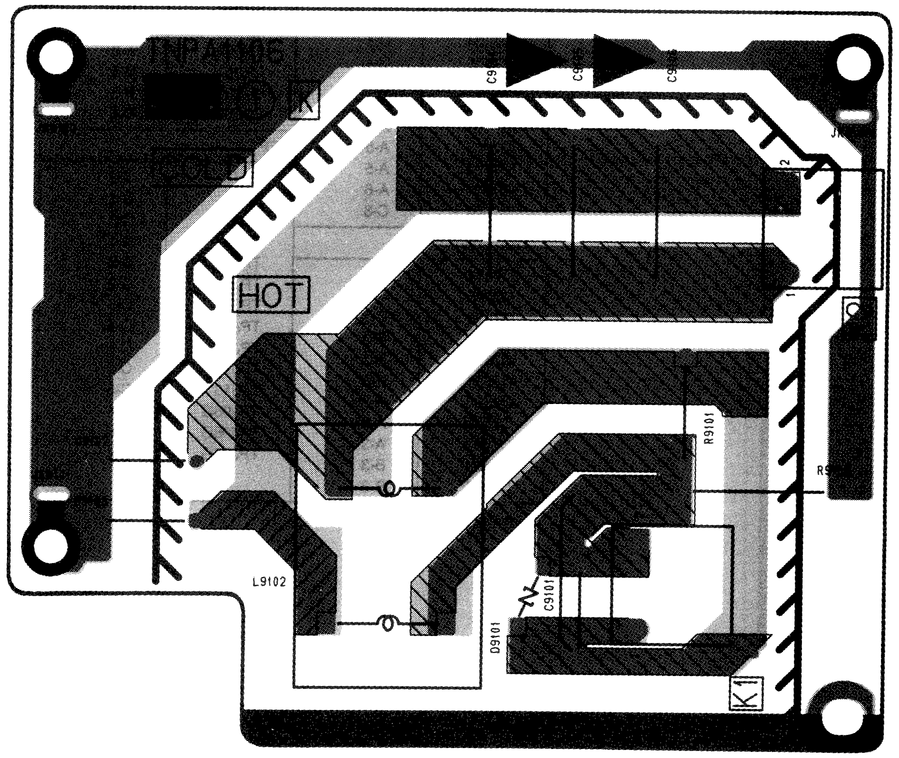
R–P.C. Board TNPA1107AA (Foil Side)


SEE REVERSE FOR ORDER No.

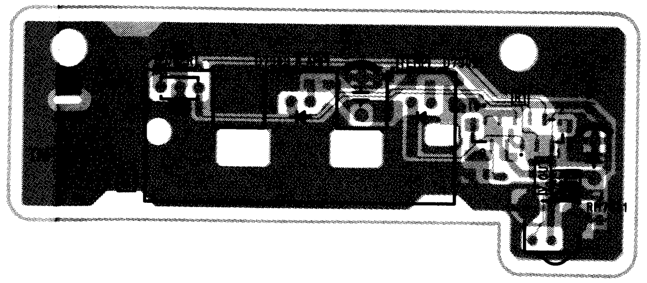
S–P.C. Board TNPA0673AA (Foil Side)


S1
S3
TNPA0673 ③ S
SEE REVERSE FOR ORDER No.

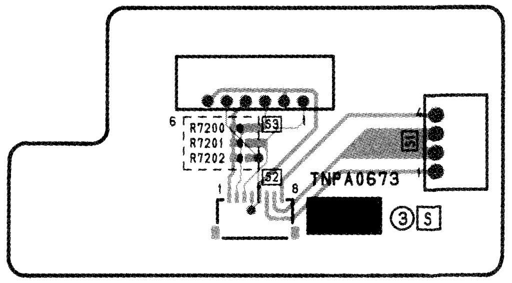
K–P.C. Board TNPA1106AA (Component Side)


TNPA1106
① K
COLD
HOT
R9101
L9102
C9101
D9101
K1

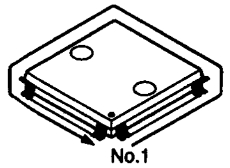
R–P.C. Board TNPA1107AA (Component Side)



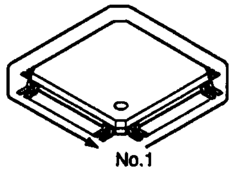
S–P.C. Board TNPA0673AA (Component Side)


R7200
R7201
R7202
S3
S1
S2
TNPA0673
③ S

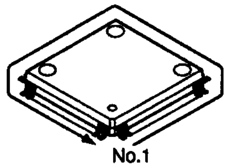
Terminal Guide of IC's and Transistors



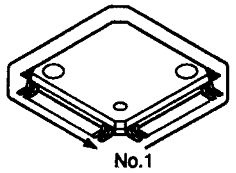
TVRJ159	80Pin
TVRJ102A	80Pin
TVSA0211	80Pin



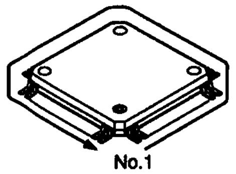
MN8236	44Pin
ET1012T0A	64Pin



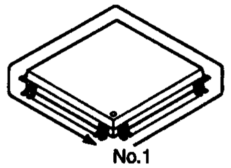
ET7010K0A	120Pin



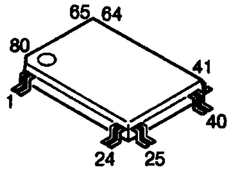
ET5010S0B	80Pin



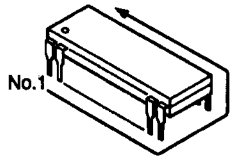
TVSA0132	160Pin



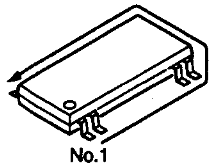
TVSA0134	100Pin


65
64
80
41
1
40
24
25

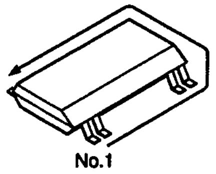
UPD65636G075	80Pin



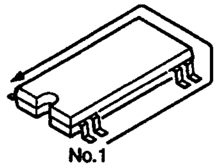
M52346SP	20Pin



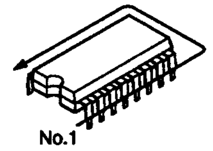
M5197BFP	8Pin
TLC2933IPWL	14Pin
FA5331M	16Pin
MC14052BF	16Pin
MC14053BF	16Pin
SN74HC244NS	16Pin
TC74HC4053AL	16Pin
UPD74HC4538G	16Pin
UPD4721GS	20Pin
74HCT244NSL	20Pin
M62393FP	20Pin
BA7657F	24Pin



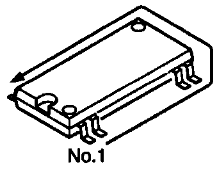
24LC21T-I/SN	8Pin
MN4778AS	28Pin



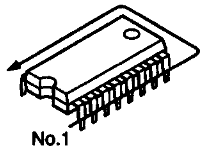
TC74HC08AF	14Pin
TC74AC163F	16Pin
TC74AC240FEL	20Pin
TC74AC244F	20Pin



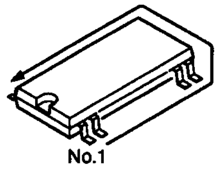
TDA4566	18Pin
M52346SP	20Pin
AN93B06K	28Pin
TA8772AN	30Pin
TA8880BN	64Pin



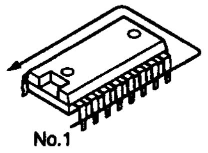
TWM700015010	24Pin
TWM700016010	24Pin



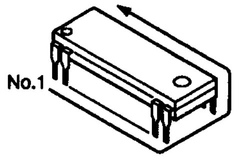
M35042-089SP	20Pin
M35042-090SP	20Pin



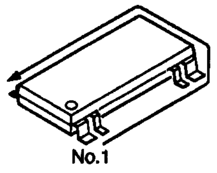
TDA8703T-T	24Pin



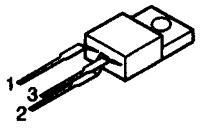
ET6010N0B	42Pin



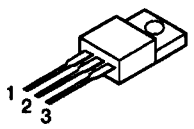
M66256GP	24Pin



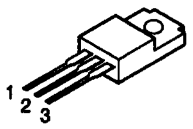
LB1831M	20Pin



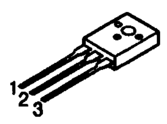
SE005N	3Pin
SE012N	3Pin



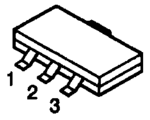
AN78M20	3Pin



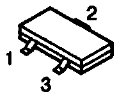
UPC24M05AHF	3Pin



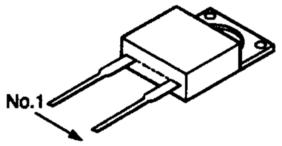
AN78N05	3Pin
AN78N09	3Pin



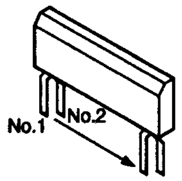
AN78L05M	3Pin
AN78L15M	3Pin
AN79L05M	3Pin



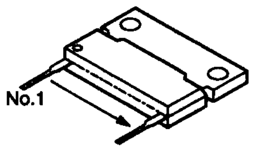
MN1382R	3Pin



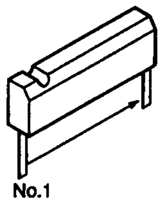
SI-3050CA	5Pin
SI-3120CA	5Pin
STRS6707F953	9Pin



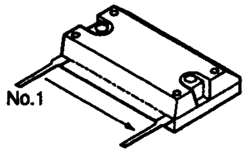
M51132L	14Pin
NJM2229M	16Pin



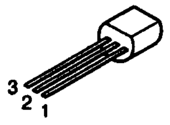
AN7147N	12Pin



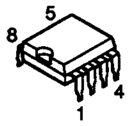
XRA15218F	8Pin



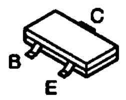
STR9005F308A	5Pin



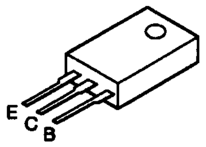
LM385Z-1.2	3Pin



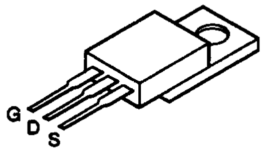
24LC16BIPA24	8Pin
TVRJ090-1	8Pin
TVRJ091-1	8Pin
TVRJ093	8Pin



2SA1462
2SB709AR
2SC2480S
2SD601AR
2SD601AQ
2SD602A-R



2SA1096A
2SC2497A



2SK1938

■ Pin Description of IC7000 (TVRJ159: Microcomputer)

Pin No.	Port	I/O	Name	Stand-BY Function
1	P15/AN15	In Init	Active	EEPROM Initialize
2	P16/AN16	In Sdown	Active	Power Voltage Check
3	P17/AN17	In S-Video in	Active	S-Video Detection (H: S-Video, L: Video)
4	AVSS	AVSS	–	A/D Converter GND
5	P130/ANO0	Out Mute		Audio Mute (H: Mute, L: Mute Off)
6	P131/ANO1	Out RGB Mute		Video Mute
7	AVREF1	5V	–	Reference Voltage of D/A Converter
8	P70/SI2/R XD	In RXD	Active	RS232C RXD
9	P71/SO2/TXD	Out TXD	Active	RS232C TXD
10	P72/SCK1	In (GND)	–	Not Use
11	P20SI1	In IICC	Active	External Control of
12	P21/SO1	Out OSD DATA	Active	OSD (DATA)
13	P22/SCK1	Out OSD CLK	Active	OSD (CLOCK)
14	P23/STB	Out STB 1	Active	OSD (STB 1)
15	P24/BUSY	Out STB 2	Active	OSD (STB 2)
16	P25/SIO/SIB	In	–	Not Use
17	P26/SO0/SB1	Out SDA	Active	IIC Bus (SDA)
18	P27/SCK0	Out SCL	Active	IIC Bus (SCL)
19	P40/AD0	Out AL 1	L	Load (AL 1)
20	P41/AD1	Out AL 2	L	Load (AL 2)
21	P42/AD2	Out ET7010	L	Load (ET7010)
22	P43/AD3	Out AL 3	L	Load (AL 3)
23	P44/AD4	Out KAME-LSI	L	Load (KAME-LSI)
24	P45/AD5	Out CLK	L	CLK for Digital IC
25	P46/AD6	Out DATA	L	DATA for Digital IC
26	P47/AD7	Out NC47	–	Not Use
27	P50/A8	Out MSW	L	Thin Control (H: On, L: Off)
28	P51/A9	Out POWER LED	Active	Power LED (H: SET, L: Stand-by)
29	P52/A10	Out LAMP LED	Active	Lamp Condition LED (H: On, L: Off)
30	P53/A11	Out THERMO LED	Active	Temperature Condition LED (H: On, L: Off)
31	P54/A12	Out ZOOM MOTOR 1	L	Control Zoom Motor 1
32	P55/A13	Out ZOOM MOTOR 2	L	Control Zoom Motor 2
33	VSS	GND	–	GND
34	P56/A14	Out FOCUS MOTOR 1	L	Control Focus Motor 1
35	P57/A15	Out FOCUS MOTOR 2	L	Control Focus Motor 2
36	P60	In STATE 1		V Signal Detection
37	P61	In STATE 2		H Signal Detection
38	P62	In HPOL		H Signal Polarity Detection
39	P63	In VPOL		V Signal Polarity Detection
40	P64	Out DAC CLOCK	L	DAC (Clock)
41	P65	Out DAC DATA	L	DAC (Data)

Pin No.	Port	I/O	Name	Stand-BY Function
42	P66	Out DAC LOAD 1	L	DAC (Load)
43	P67	Out DAC LOAD 2	L	DAC (Load)
44	P30/TO0	Out FAN ON/OFF	Active	Fan Condition (H: Normal, L: Abnormal)
45	P31/TO1	Out HC	Active	H Pulse Check
46	P32/TO2	Out FAN CTL	Active	Control FAN Speed
47	P33/TI1	In HPOL	Active	H Pulse input (Negative Polarity)
48	P34/TI2	Out STBY/MAIN	L	Power Control (H: On, L: Off)
49	P35/PCL	Out BLST ON	L	Ballast Power Control (H: On, L: Off)
50	P36/BUZ	In LAMP ON/OFF	Active	Lamp On
51	P37	In FAN SENCE	Active	FAN Stop
52	P120/RTP0	Out VID/RGB	I	Video/RGB Selector (H: Video, L: RGB)
53	P120/RTP1	Out RGB1/RGB 2	I	RGB1/RGB2 Selector (H: RGB1, L: RGB2)
54	P120/RTP2	Out RGB1/Other	I	RGB1/Other Selector (H: RGB1, L: Other)
55	P123/RTP3	Out NC123		Not Use
56	P124/RTP4	Out SWB		Video System Selector 1
57	P125/RTP5	Out SWA		Video System Selector 2
58	P126/RTP6	Out SECAM		Video System Selector 3
59	P127/RTP7	Out PAL. SECAM		Video System Selector 4
60	REST	SYSTEM RESET	–	System Reset
61	P00/INTP0/TI00	In POWER SENSE	–	Main Power Sense
62	P01/INTP1/TI01	In HC. IN	Active	H Pulse Check
63	P02/INTP2	In VPOL	–	V Pulse Input (Negative Polarity)
64	P03/INTP3	In R. COM IN	Active	Remote Control Input (Negative Polarity)
65	P04/INTP4	In ZOOM SENSE 1		Zoom Sense 1
66	P05/INTP5	In ZOOM SENSE 2		Zoom Sense 2
67	P06/INTP6	In FOCUS SENSE 1		Focus Sense 1
68	Vdd	5V	–	(+) 5V
69	X2	5MHz	Active	System Clock
70	X1	In 5MHz	Active	System Clock
71	Vpp	GND	–	Program Writing Control
72	XT2	OPEN	–	Sub-system Clock
73	P07/XT1	In FOCUS SENSE 2	–	Focus Sense 2
74	Avdd	5V	–	Power for A/D Converter
75	AVref0	In 5V	–	Reference Voltage of A/D Converter
76	P10/ANI0	In Key SCAN 1	–	Key Scan 1
77	P11/ANI1	In Key SCAN 2	Active	Key Scan 2
78	P12/ANI2	In Key SCAN 3	Active	Key Scan 3
79	P13/ANI3	In Key SCAN 4	Active	Key Scan 4
80	P14/ANI4	In THERMO SENS	Active	Temperature Senser Input

Schematic Diagram for Models PT-L595E/PT-L595EG

Important Safety Notice

Components identified by the International symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Notes:

1. **Resistor**
   All resistors are carbon 1/4W resistor, unless marked as follows:
   Unit of resistance is OHM [Ω] (K=1,000 M=1,000,000).

○ : Nonflammable	⊠ : Metal Oxide
△ : Solid	**O** : Metal Film
◸ : Wire Wound	⊗ : Fuse

2. **Capacitor**
   All capacitors are ceramic 50V capacitor, unless marked as follows:
   Unit of capacitance is μF, unless otherwise noted.

⊗ : Temperature Compensation	⫩ : Electrolytic
Ⓜ : Polyester	NP ⫩ : Bipolar
ⓜ : Metalized Polyester	Ⓣ : Dipped Tantalum
⊠ : Polypropylene	Ⓩ : Z-Type

3. **Coil**
   Unit of inductance is μH, unless otherwise noted.

4. **Test Point**
   ⍿ : Test Point position

5. **Voltage Measurement**
   Voltage is measured by an electronic voltmeter receiving rainbow color bar signal when all customer's controls are set to the maximum position.

6. **This schematic diagram is the latest at the time of printing and subject to change without notice.**

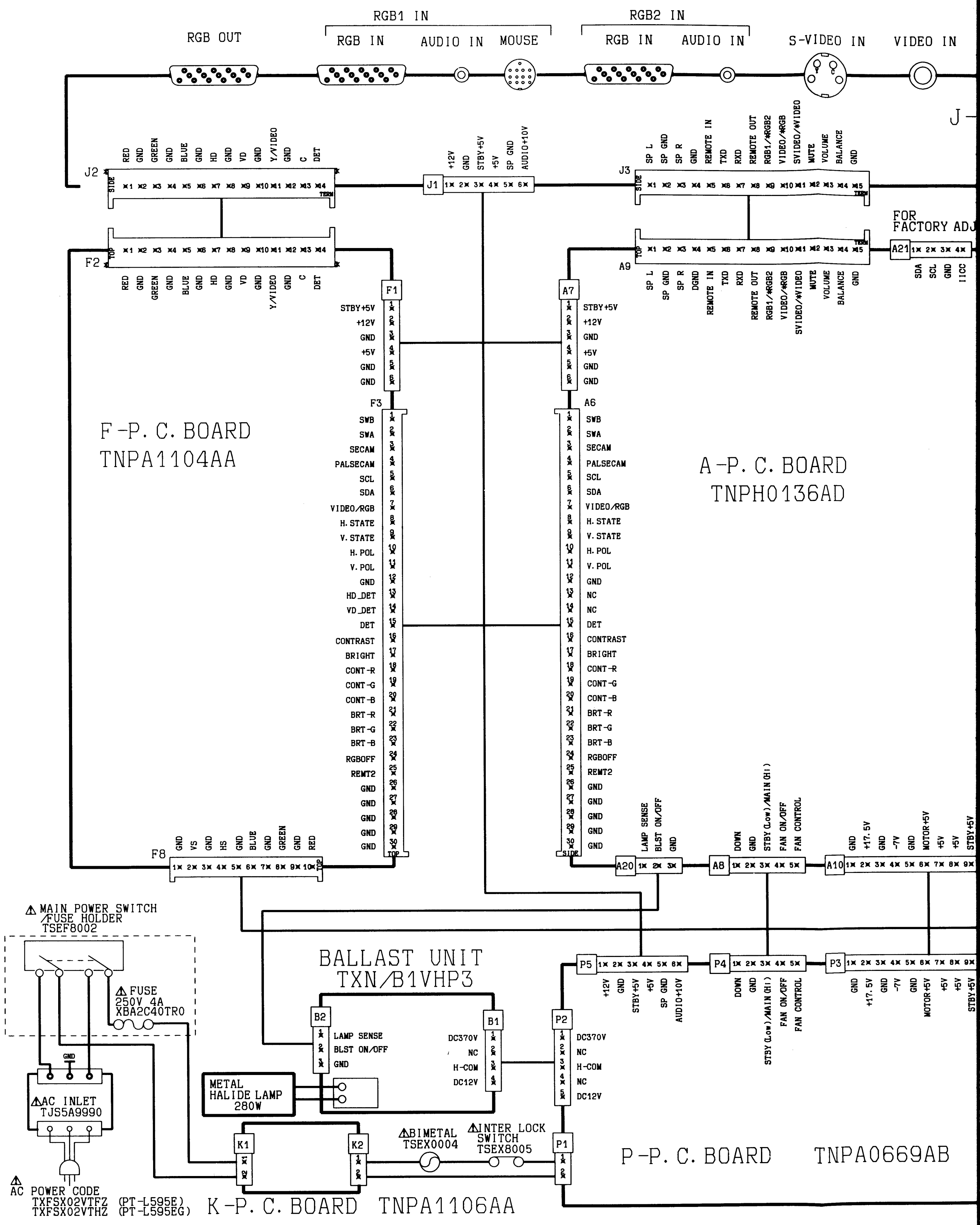
7.
——	Positive voltage lines
⇨	Video signal
▭▭▭▷	S-Video signal
▨▷	V or H output signal
➡	R.G.B. signal
■■■➡	Audio signal

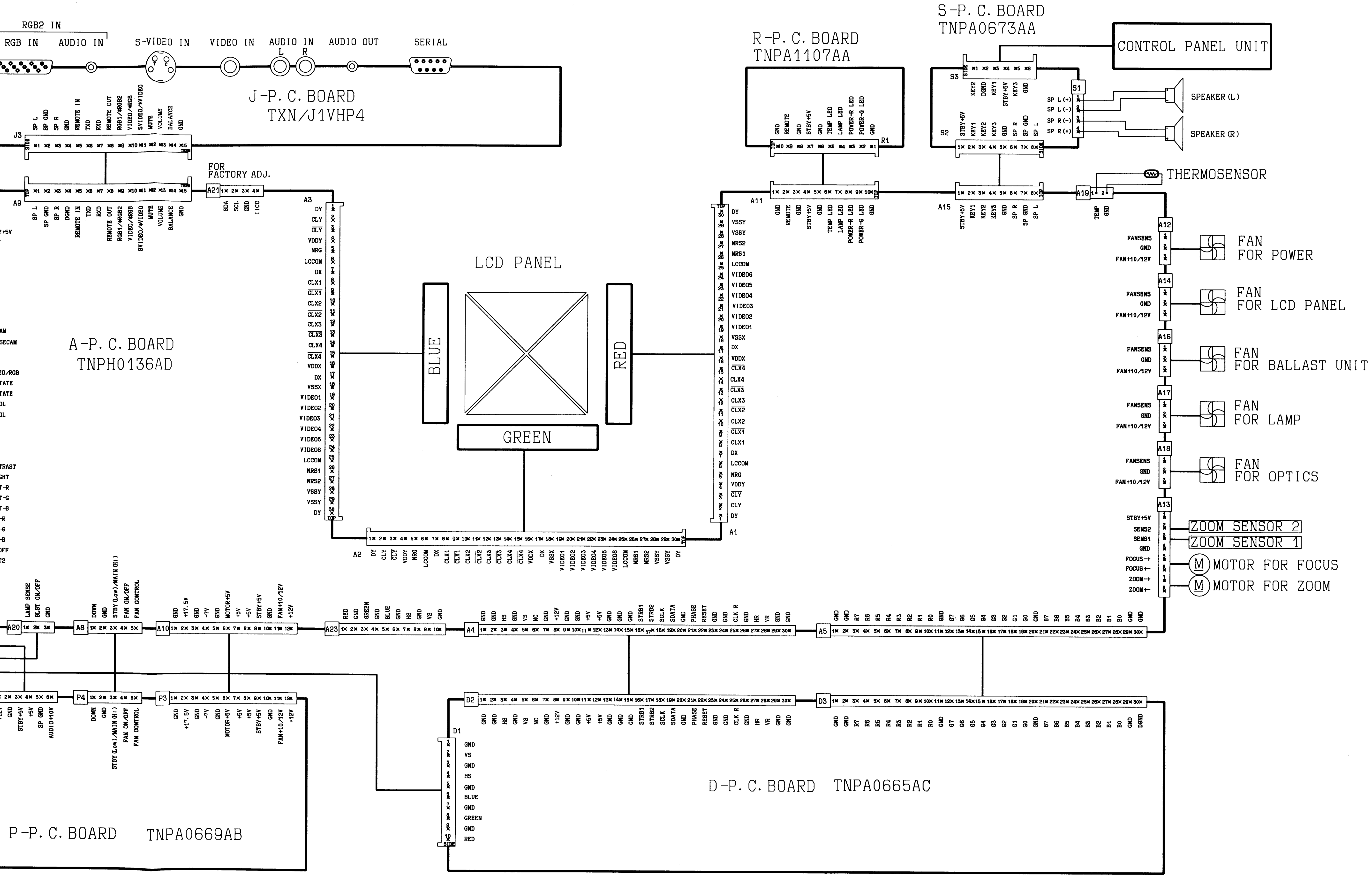
Note:
The power Circuit board contains a circuit area which uses separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.

PRECAUTIONS

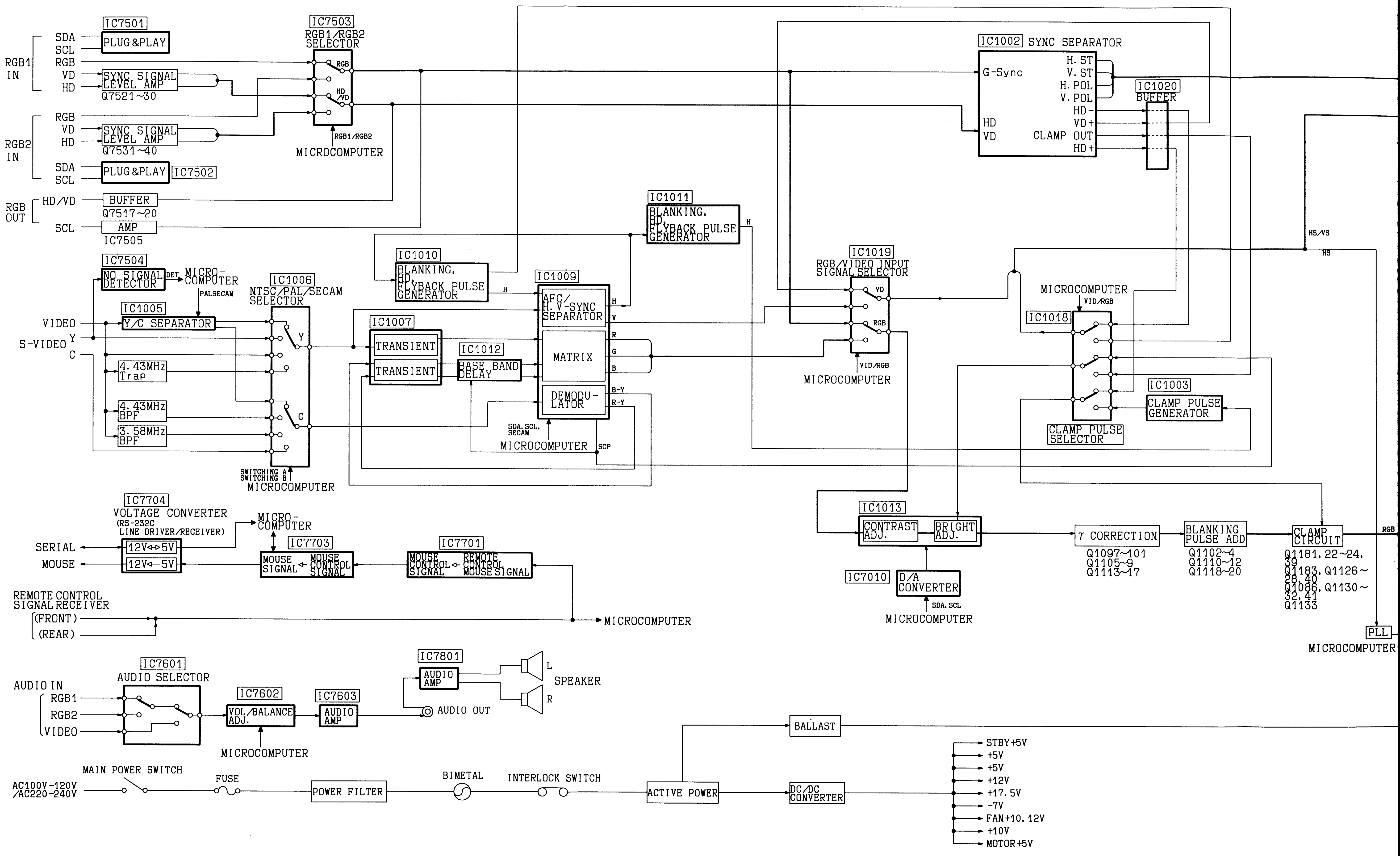
1. Do not touch the hot part or the hot and cold parts at the same time or you may receive a shock.
2. Do not short-circuit the hot and cold circuits or a fuse may blow and pars may break.
3. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may below. Connect the ground of instruments to the ground connection of the circuit being measured.
4. Make sure to disconnect the power plug before removing the chassis.

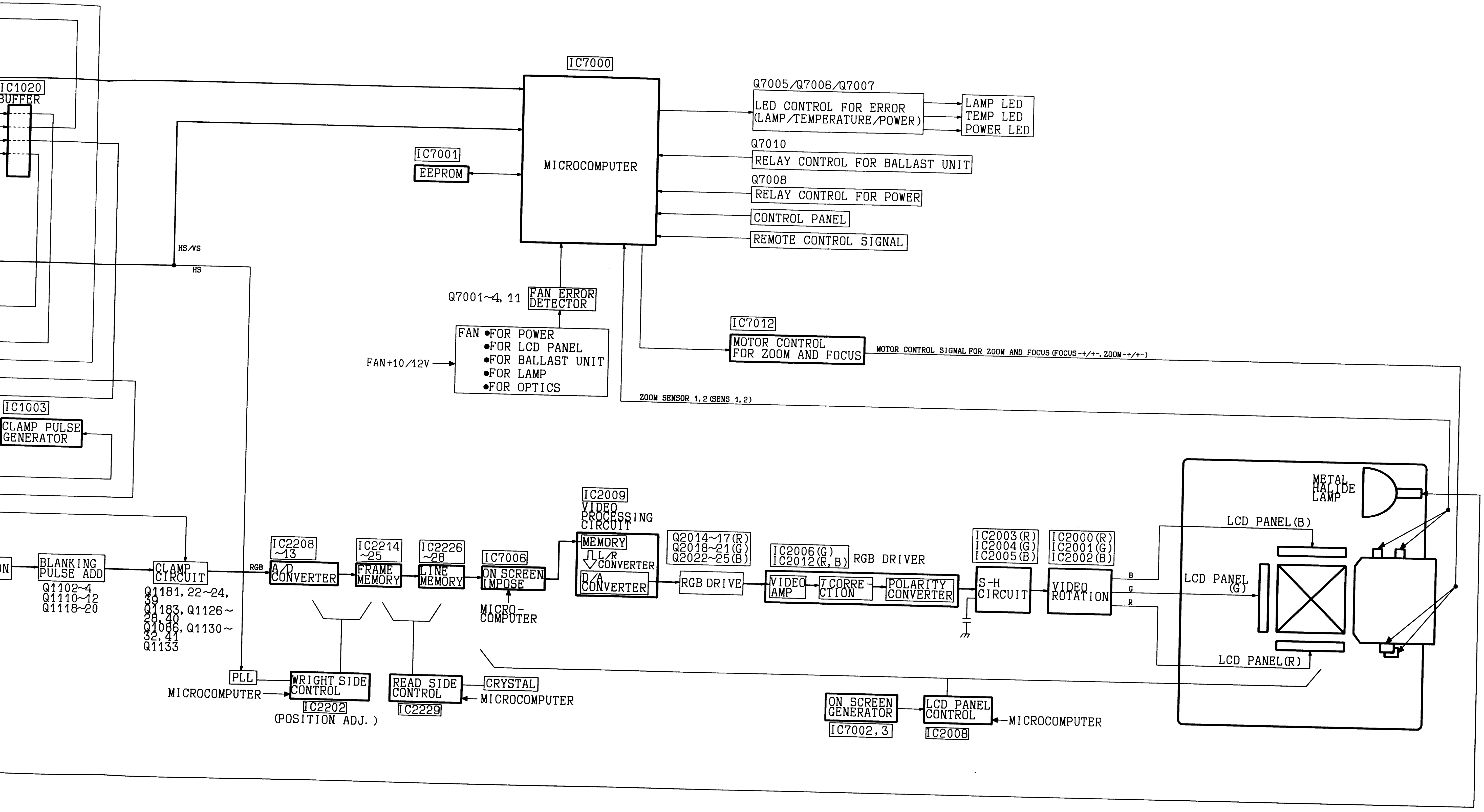
■ INTERCONNECTION BLOCK DIAGRAM

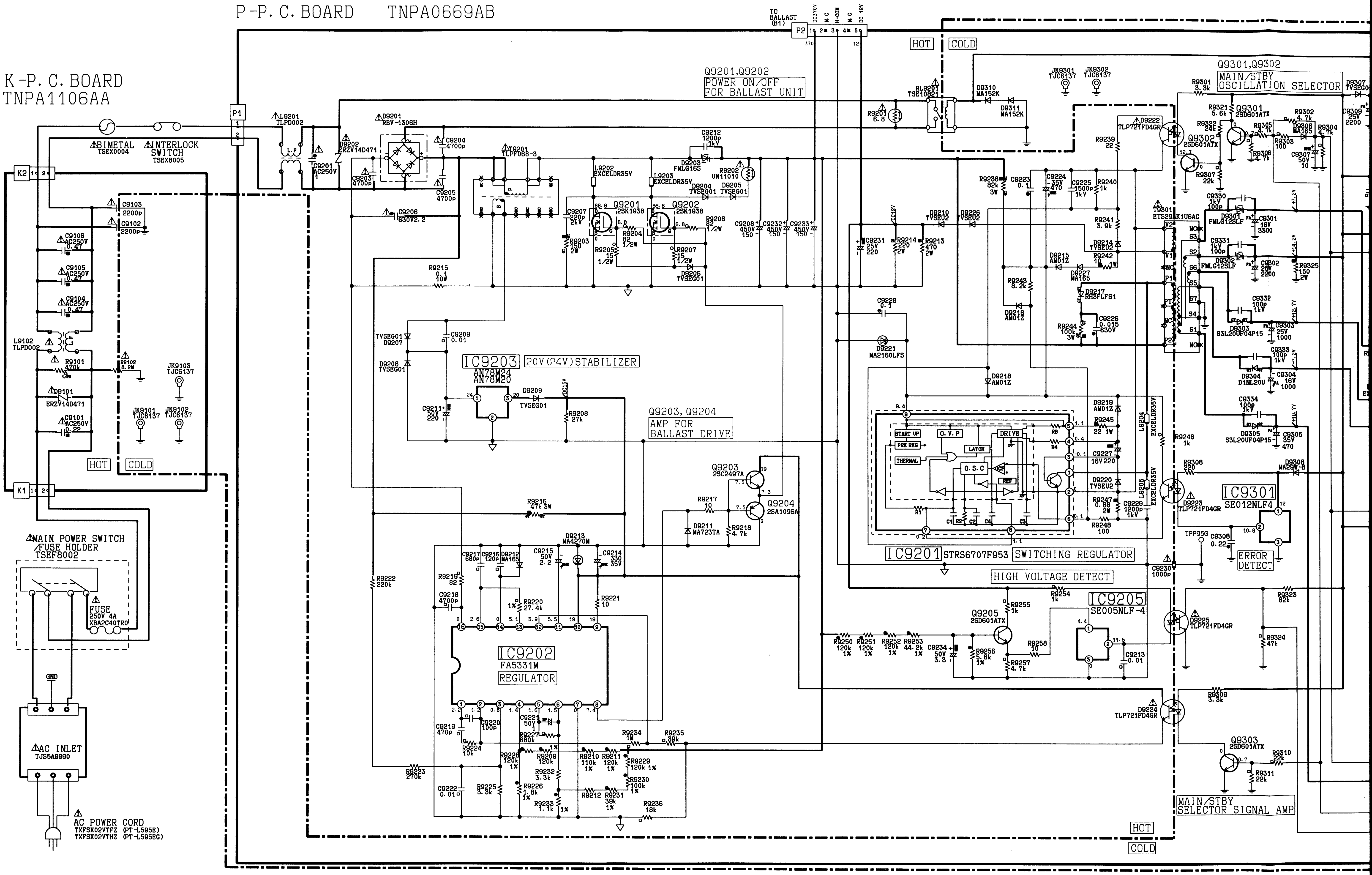

RGB OUT
RGB1 IN
RGB IN
AUDIO IN
MOUSE
RGB2 IN
RGB IN
AUDIO IN
S-VIDEO IN
VIDEO IN
J2
J1
J3
F2
A9
FOR FACTORY ADJ
A21
F1
A7
F3
A6
F-P.C.BOARD
TNPA1104AA
A-P.C.BOARD
TNPH0136AD
F8
A20
A8
A10
⚠MAIN POWER SWITCH /FUSE HOLDER
TSEF8002
⚠FUSE 250V 4A XBA2C40TR0
BALLAST UNIT
TXN/B1VHP3
B2
B1
P5
P4
P3
P2
METAL HALIDE LAMP 280W
⚠AC INLET
TJS5A9990
K1
K2
⚠BIMETAL TSEX0004
⚠INTER LOCK SWITCH TSEX8005
P1
P-P.C.BOARD TNPA0669AB
⚠AC POWER CODE
TXFSX02VTFZ (PT-L595E)
TXFSX02VTHZ (PT-L595EG)
K-P.C.BOARD TNPA1106AA

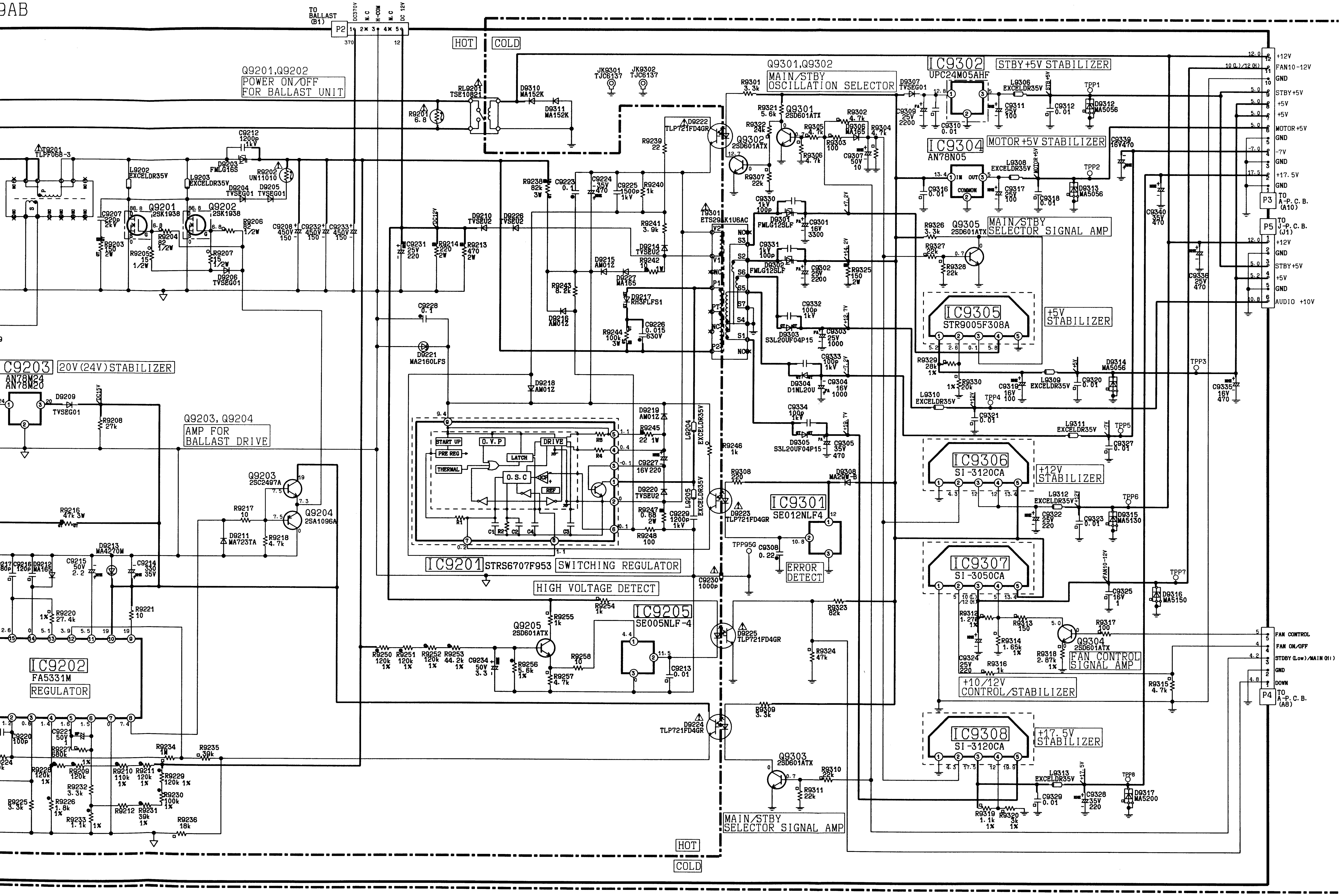

RGB2 IN
RGB IN
AUDIO IN
S-VIDEO IN
VIDEO IN
AUDIO IN L R
AUDIO OUT
SERIAL
J-P.C.BOARD TXN/J1VHP4
J3
A9
FOR FACTORY ADJ.
A21
SDA SCL GND IICC
A-P.C.BOARD TNPH0136AD
A3
LCD PANEL
BLUE
RED
GREEN
A1
A2
A11
R-P.C.BOARD TNPA1107AA
R1
GND REMOTE GND STBY+5V GND TEMP LED LAMP LED POWER-R LED POWER-G LED GND
S-P.C.BOARD TNPA0673AA
CONTROL PANEL UNIT
S1
S2
S3
KEY2 DGND KEY1 STBY+5V KEY3 GND
STBY+5V KEY1 KEY2 KEY3 GND SP R SP GND SP L
SP L(+) SP L(-) SP R(-) SP R(+)
SPEAKER (L)
SPEAKER (R)
A15
A19
THERMOSENSOR
TEMP GND
A12
FAN FOR POWER
A14
FAN FOR LCD PANEL
A16
FAN FOR BALLAST UNIT
A17
FAN FOR LAMP
A18
FAN FOR OPTICS
FANSENS GND FAN+10/12V
A13
STBY+5V SENS2 SENS1 GND FOCUS-+ FOCUS+- ZOOM-+ ZOOM+-
ZOOM SENSOR 2
ZOOM SENSOR 1
MOTOR FOR FOCUS
MOTOR FOR ZOOM
A20
LAMP SENSE BLST ON/OFF GND
A8
DOWN GND STBY (Low)/MAIN (Hi) FAN ON/OFF FAN CONTROL
A10
GND +17.5V GND -7V GND MOTOR+5V +5V +5V STBY+5V GND FAN+10/12V +12V
A23
RED GND GREEN GND BLUE GND HS GND VS GND
A4
A5
P4
P3
P-P.C.BOARD TNPA0669AB
D1
GND VS GND HS GND BLUE GND GREEN GND RED
D2
D3
D-P.C.BOARD TNPA0665AC

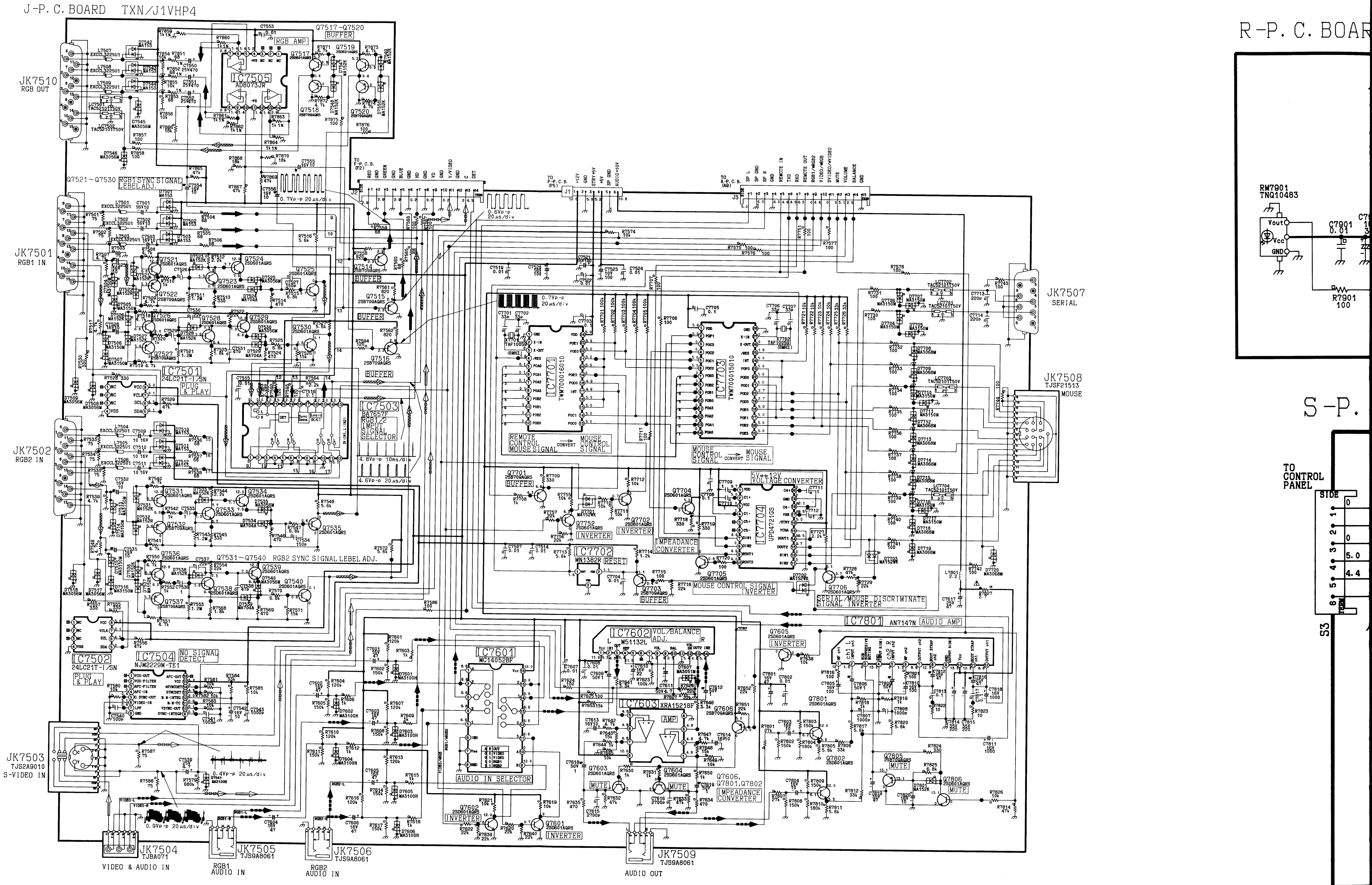
SIGNAL BLOCK DIAGRAM

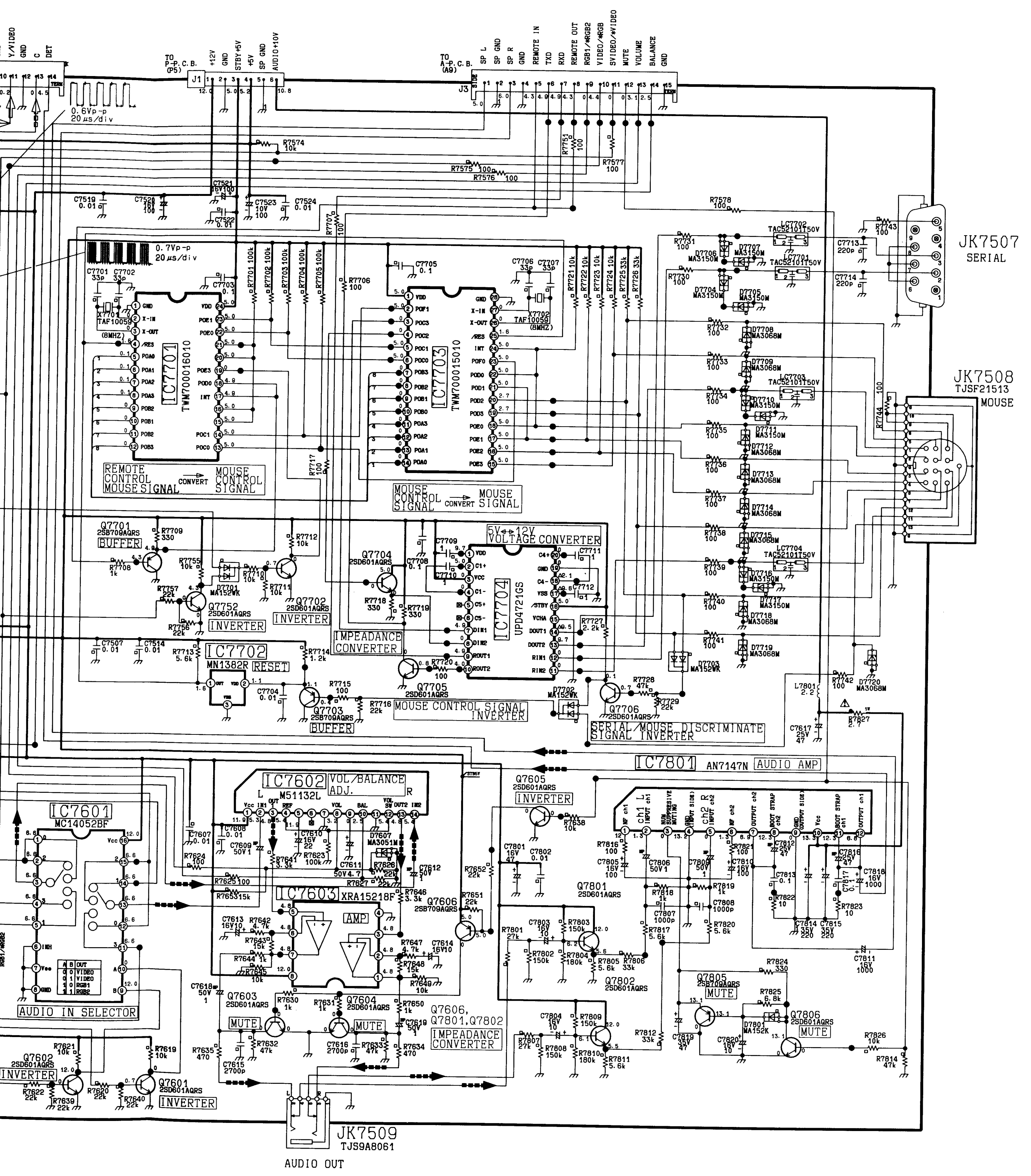

RGB1 IN
SDA
SCL
RGB
VD
HD
IC7501
PLUG&PLAY
SYNC SIGNAL LEVEL AMP
Q7521~30
RGB2 IN
SYNC SIGNAL LEVEL AMP
Q7531~40
PLUG&PLAY
IC7502
RGB OUT
HD/VD
BUFFER
Q7517~20
AMP
IC7505
IC7503
RGB1/RGB2 SELECTOR
HD/VD
RGB1/RGB2
MICROCOMPUTER
IC1002 SYNC SEPARATOR
G-Sync
H. ST
V. ST
H. POL
V. POL
HD-
VD+
CLAMP OUT
HD+
IC1020
BUFFER
IC1011
BLANKING, HD, FLYBACK PULSE GENERATOR
H
HS/VS
HS
IC7504
NO SIGNAL DETECTOR
DET
MICRO-COMPUTER
PALSECAM
IC1005
Y/C SEPARATOR
VIDEO
S-VIDEO
Y
C
4.43MHz Trap
4.43MHz BPF
3.58MHz BPF
IC1006
NTSC/PAL/SECAM SELECTOR
SWITCHING A
SWITCHING B
MICROCOMPUTER
IC1010
BLANKING, HD, FLYBACK PULSE GENERATOR
IC1007
TRANSIENT
TRANSIENT
IC1012
BASE BAND DELAY
IC1009
AFC/H.V-SYNC SEPARATOR
V
R
G
B
MATRIX
DEMODU-LATOR
B-Y
R-Y
SDA, SCL, SECAM
MICROCOMPUTER
SCP
IC1019
RGB/VIDEO INPUT SIGNAL SELECTOR
VD
VID/RGB
MICROCOMPUTER
MICROCOMPUTER
VID/RGB
IC1018
IC1003
CLAMP PULSE GENERATOR
CLAMP PULSE SELECTOR
IC1013
CONTRAST ADJ.
BRIGHT ADJ.
IC7010
D/A CONVERTER
SDA, SCL
MICROCOMPUTER
γ CORRECTION
Q1097~101
Q1105~9
Q1113~17
BLANKING PULSE ADD
Q1102~4
Q1110~12
Q1118~20
CLAMP CIRCUIT
Q1181, 22~24, 39
Q1183, Q1126~28, 40
Q1066, Q1130~32, 41
Q1133
RGB
PLL
MICROCOMPUTER
IC7704
VOLTAGE CONVERTER
(RS-232C LINE DRIVER/RECEIVER)
MICRO-COMPUTER
SERIAL
MOUSE
12V↔5V
12V←5V
IC7703
MOUSE SIGNAL
MOUSE CONTROL SIGNAL
IC7701
MOUSE CONTROL SIGNAL
REMOTE CONTROL MOUSE SIGNAL
REMOTE CONTROL SIGNAL RECEIVER
(FRONT)
(REAR)
MICROCOMPUTER
AUDIO IN
RGB1
RGB2
VIDEO
IC7601
AUDIO SELECTOR
IC7602
VOL/BALANCE ADJ.
MICROCOMPUTER
IC7603
AUDIO AMP
IC7801
AUDIO AMP
AUDIO OUT
L
R
SPEAKER
MAIN POWER SWITCH
AC100V-120V /AC220-240V
FUSE
POWER FILTER
BIMETAL
INTERLOCK SWITCH
ACTIVE POWER
BALLAST
DC/DC CONVERTER
STBY+5V
+5V
+5V
+12V
+17.5V
-7V
FAN+10, 12V
+10V
MOTOR+5V


IC1020
BUFFER
IC7000
MICROCOMPUTER
IC7001
EEPROM
Q7005/Q7006/Q7007
LED CONTROL FOR ERROR (LAMP/TEMPERATURE/POWER)
LAMP LED
TEMP LED
POWER LED
Q7010
RELAY CONTROL FOR BALLAST UNIT
Q7008
RELAY CONTROL FOR POWER
CONTROL PANEL
REMOTE CONTROL SIGNAL
HS/VS
HS
Q7001~4, 11
FAN ERROR DETECTOR
FAN •FOR POWER
•FOR LCD PANEL
•FOR BALLAST UNIT
•FOR LAMP
•FOR OPTICS
FAN+10/12V
IC7012
MOTOR CONTROL FOR ZOOM AND FOCUS
MOTOR CONTROL SIGNAL FOR ZOOM AND FOCUS (FOCUS-+/+-, ZOOM-+/+-)
ZOOM SENSOR 1, 2 (SENS 1, 2)
IC1003
CLAMP PULSE GENERATOR
BLANKING PULSE ADD
Q1102~4
Q1110~12
Q1118~20
CLAMP CIRCUIT
Q1181, 22~24, 39
Q1183, Q1126~28, 40
Q1086, Q1130~32, 41
Q1133
RGB
IC2208 ~13
A/D CONVERTER
IC2214 ~25
FRAME MEMORY
IC2226 ~28
LINE MEMORY
IC7006
ON SCREEN IMPOSE
MICRO-COMPUTER
IC2009
VIDEO PROCESSING CIRCUIT
MEMORY
L/R CONVERTER
D/A CONVERTER
Q2014~17 (R)
Q2018~21 (G)
Q2022~25 (B)
RGB DRIVE
IC2006 (G)
IC2012 (R, B)
RGB DRIVER
VIDEO AMP
γ CORRECTION
POLARITY CONVERTER
IC2003 (R)
IC2004 (G)
IC2005 (B)
S-H CIRCUIT
IC2000 (R)
IC2001 (G)
IC2002 (B)
VIDEO ROTATION
B
G
R
METAL HALIDE LAMP
LCD PANEL (B)
LCD PANEL (G)
LCD PANEL (R)
PLL
MICROCOMPUTER
WRIGHT SIDE CONTROL
IC2202
(POSITION ADJ.)
READ SIDE CONTROL
IC2229
CRYSTAL
MICROCOMPUTER
ON SCREEN GENERATOR
IC7002, 3
LCD PANEL CONTROL
IC2008
MICROCOMPUTER

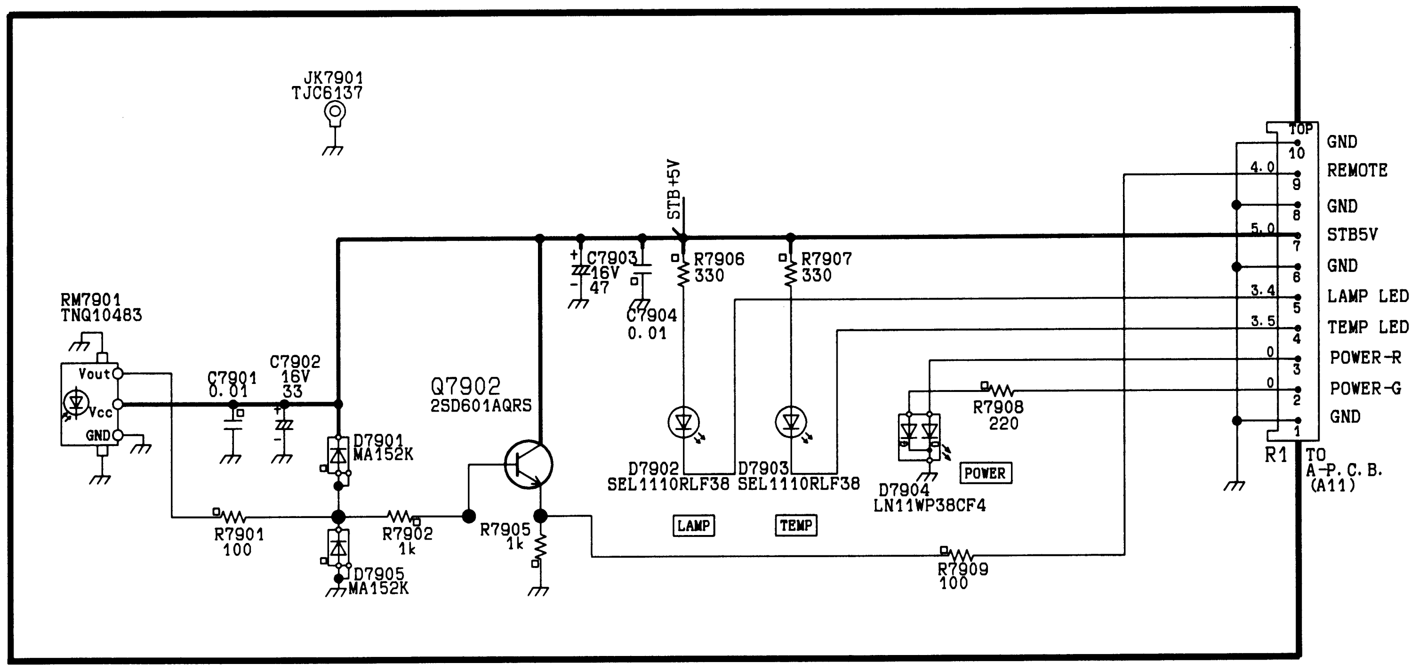

P-P.C. BOARD TNPA0669AB
K-P.C. BOARD TNPA1106AA
TO BALLAST (B1)
P2
DC370V
N.C
H-COM
N.C
DC 12V
370
12
HOT
COLD
P1
K1
K2
⚠BIMETAL TSEX0004
⚠INTERLOCK SWITCH TSEX8005
C9103 2200p
C9102 2200p
C9106 AC250V 0.47
C9105 AC250V 0.47
C9104 AC250V 0.47
L9102 TLPD002
R9101 470k
R9102 8.2M
⚠D9101 ERZV14D471
C9101 AC250V 0.22
JK9101 TJC6137
JK9102 TJC6137
JK9103 TJC6137
⚠MAIN POWER SWITCH /FUSE HOLDER TSEF8002
⚠FUSE 250V 4A XBA2C40TR0
GND
⚠AC INLET TJS5A9990
⚠ AC POWER CORD
TXFSX02VTFZ (PT-L595E)
TXFSX02VTHZ (PT-L595EG)
⚠L9201 TLPD002
⚠D9201 RBV-1306H
⚠D9202 ERZV14D471
⚠C9201 AC250V 1
C9203 4700p
⚠C9204 4700p
C9205 4700p
⚠T9201 TLPF068-3
⚠C9206 630V2.2
R9215 0.1 10W
TVSEG01 D9207
D9208 TVSEG01
C9209 0.01
IC9203 20V(24V)STABILIZER
AN78M24
AN78M20
D9209 TVSEG01
C9211 50V 220
R9208 27k
L9202 EXCELDR35V
L9203 EXCELDR35V
C9212 1200p 1kV
D9203 FMLG16S
R9202 UN11010
D9204 TVSEG01
D9205 TVSEG01
C9207 220p 2kV
Q9201,Q9202
POWER ON/OFF FOR BALLAST UNIT
Q9201 2SK1938
Q9202 2SK1938
R9203 150 2W
R9204 82 1/2W
R9205 15 1/2W
R9206 82 1/2W
R9207 15 1/2W
D9206 TVSEG01
C9208 450V 150
C9232 450V 150
C9233 450V 150
Q9203, Q9204
AMP FOR BALLAST DRIVE
Q9203 2SC2497A
Q9204 2SA1096A
R9216 47k 3W
R9217 10
D9211 MA723TA
R9218 4.7k
D9213 MA4270M
C9215 50V 2.2
C9214 330 35V
C9217 680p
C9216 120p
D9212 MA165
R9219 82
C9218 4700p
R9220 27.4k
R9221 10
R9222 220k
IC9202 FA5331M REGULATOR
C9219 470p
C9220 100p
C9221 50V 1
R9227 680k
R9224 10k
R9228 120k 1%
R9209 120k 1%
R9210 110k 1%
R9211 120k 1%
R9229 120k 1%
R9230 100k 1%
R9232 3.3k
R9226 1.8k 1%
R9233 1.1k 1%
R9212
R9231 39k 1%
R9236 18k
R9234 1M
R9235 39k
R9223 270k
C9222 0.01
R9225 3.3k
⚠RL9201 TSE10821
R9201 6.8
D9310 MA152K
D9311 MA152K
JK9301 TJC6137
JK9302 TJC6137
D9210 TVSEU2
D9226 TVSEU2
C9231 25V 220
R9214 220 2W
R9213 470 2W
R9238 82k 3W
C9223 0.1
C9224 35V 470
C9225 1500p 1kV
R9240 1k
R9239 22
R9241 3.9k
D9214 TVSEU2
R9242 10
D9215 AM01Z
D9227 MA165
D9217 RH3FLFS1
R9243 8.2k
D9216 AM01Z
R9244 100k 3W
C9226 0.015 630V
C9228 0.1
D9221 MA2160LFS
D9218 AM01Z
D9219 AM01Z
R9245 22 1W
C9227 16V 220
D9220 TVSEU2
R9247 0.68 2W
C9229 1200p 1kV
R9248 100
L9204 EXCELDR35V
L9205 EXCELDR35V
START UP
PRE REG
THERMAL
O.V.P
LATCH
DRIVE
O.S.C
REF
IC9201 STRS6707F953 SWITCHING REGULATOR
HIGH VOLTAGE DETECT
⚠C9230 1000p
R9250 120k 1%
R9251 120k 1%
R9252 120k 1%
R9253 44.2k 1%
C9234 50V 3.3
Q9205 2SD601ATX
R9255 1k
R9254 1k
R9256 5.6k 1%
R9257 4.7k
R9258 10
IC9205 SE005NLF-4
C9213 0.01
⚠T9301 ETS29AK1U6AC
Q9301,Q9302 MAIN/STBY OSCILLATION SELECTOR
R9301 3.3k
R9321 5.6k
Q9301 2SD601ATX
R9322 24k
Q9302 2SD601ATX
R9305 4.7k
R9302 4.7k
D9306 MA165
R9304 4.7k
R9303 100
R9306 4.7k
C9307 50V 10
R9307 22k
C9309 25V 2200
D9307 TVSEG0
⚠D9222 TLP721FD4GR
C9330 1kV 100p
D9301 FMLG12SLF
C9301 16V 3300
C9331 1kV 100p
D9302 FMLG12SLF
C9302 25V 2200
R9325 150 2W
C9332 100p 1kV
D9303 S3L20UF04P15
C9303 25V 1000
C9333 100p 1kV
D9304 D1NL20U
C9304 16V 1000
C9334 100p 1kV
D9305 S3L20UF04P15
C9305 35V 470
R9246 1k
R9308 220
D9308 MA2
⚠D9223 TLP721FD4GR
IC9301 SE012NLF4
ERROR DETECT
TPP95G
C9308 0.22
R9323 82k
⚠D9225 TLP721FD4GR
R9324 47k
D9224 TLP721FD4GR
R9309 3.3k
Q9303 2SD601ATX
R9310 22k
R9311 22k
MAIN/STBY SELECTOR SIGNAL AMP


9AB
TO BALLAST (B1)
P2
DC370V
N.C
H-COM
N.C
DC 12V
HOT
COLD
Q9201,Q9202
POWER ON/OFF FOR BALLAST UNIT
RL9201 TSE10821
R9201 6.8
D9310 MA152K
D9311 MA152K
JK9301 TJC6137
JK9302 TJC6137
T9201 TLPF068-3
L9202 EXCELDR35V
L9203 EXCELDR35V
C9212 1200p 1kV
D9203 FMLG16S
R9202 UN11010
D9204 TVSEG01
D9205 TVSEG01
Q9201 2SK1938
Q9202 2SK1938
C9207 220p 2kV
R9203 150 2W
R9204 82 1/2W
R9205 15 1/2W
R9206 82 1/2W
R9207 15 1/2W
D9206 TVSEG01
C9208 450V 150
C9232 450V 150
C9233 450V 150
IC9203 20V(24V)STABILIZER
AN78M24
AN78M20
D9209 TVSEG01
R9208 27k
Q9203, Q9204
AMP FOR BALLAST DRIVE
Q9203 2SC2497A
Q9204 2SA1096A
R9217 10
D9211 MA723TA
R9218 4.7k
R9216 47k 3W
D9213 MA4270M
C9215 50V 2.2
C9214 330 35V
R9220 27.4k
R9221 10
IC9202 FA5331M REGULATOR
C9220 100p
C9221 50V
R9227 680k
R9228 120k 1%
R9209 120k
R9232 3.3k
R9226 1.8k 1%
R9233 1.1k 1%
R9225 3.3k
R9210 110k 1%
R9211 120k 1%
R9212
R9231 39k 1%
R9229 120k 1%
R9230 100k 1%
R9234 1M
R9235 39k
R9236 18k
D9210 TVSEU2
D9226 TVSEU2
C9231 25V 220
R9214 220 2W
R9213 470 2W
C9228 0.1
D9221 MA2160LFS
R9238 82k 3W
C9223 0.1
C9224 35V 470
C9225 1500p 1kV
R9240 1k
R9239 22
D9222 TLP721FD4GR
R9241 3.9k
D9214 TVSEU2
R9242 10
D9215 AM01Z
D9227 MA165
R9243 8.2k
D9217 RK3FLFS1
D9216 AM01Z
R9244 100k 3W
C9226 0.015 630V
D9218 AM01Z
START UP
PRE REG
THERMAL
O.V.P
LATCH
DRIVE
O.S.C
REF
D9219 AM01Z
R9245 22 1W
C9227 16V 220
D9220 TVSEU2
R9247 0.68 2W
C9229 1200p 1kV
R9248 100
L9204 EXCELDR35V
L9205 EXCELDR35V
IC9201 STR56707F953 SWITCHING REGULATOR
HIGH VOLTAGE DETECT
Q9205 2SD601ATX
R9255 1k
R9254 1k
IC9205 SE005NLF-4
R9250 120k 1%
R9251 120k 1%
R9252 120k 1%
R9253 44.2k 1%
C9234 50V 3.3
R9256 5.6k 1%
R9257 4.7k
R9258 10
C9213 0.01
C9230 1000p
T9301 ETS29AK1U6AC
R9246 1k
R9308 220
D9308 MA29W-B
D9223 TLP721FD4GR
IC9301 SE012NLF4
TPP95G
C9308 0.22
ERROR DETECT
D9225 TLP721FD4GR
R9323 82k
R9324 47k
D9224 TLP721FD4GR
R9309 3.3k
Q9303 2SD601ATX
R9310 22k
R9311 22k
MAIN/STBY SELECTOR SIGNAL AMP
Q9301,Q9302
MAIN/STBY OSCILLATION SELECTOR
R9301 3.3k
R9321 5.6k
Q9301 2SD601ATX
R9322 24k
Q9302 2SD601ATX
R9307 22k
R9305 4.7k
R9302 4.7k
D9306 MA165
R9304 4.7k
R9303 100
R9306 4.7k
C9307 50V 10
C9330 1kV 100p
D9301 FMLG12SLF
C9301 16V 3300
C9331 1kV 100p
D9302 FMLG12SLF
C9302 25V 2200
R9325 150 2W
C9332 100p 1kV
D9303 S3L20UF04P15
C9303 25V 1000
C9333 100p 1kV
D9304 D1NL20U
C9304 16V 1000
C9334 100p 1kV
D9305 S3L20UF04P15
C9305 35V 470
D9307 TVSEG01
IC9302 STBY+5V STABILIZER UPC24M05AHF
C9309 25V 2200
C9310 0.01
L9306 EXCELDR35V
C9311 25V 100
C9312 0.01
TPP1
D9312 MA5056
IC9304 MOTOR+5V STABILIZER AN78N05
L9308 EXCELDR35V
C9316 0.01
C9317 25V 100
C9318 0.01
TPP2
D9313 MA5056
C9339 16V470
C9340 35V 470
R9326 3.3k
Q9305 2SD601ATX
MAIN/STBY SELECTOR SIGNAL AMP
R9327 22k
R9328 22k
IC9305 STR9005F308A
+5V STABILIZER
R9329 28k 1%
R9330 20k 1%
C9319 16V 100
L9309 EXCELDR35V
C9320 0.01
D9314 MA5056
TPP3
C9335 16V 470
C9336 25V 470
L9310 EXCELDR35V
TPP4
C9321 0.01
L9311 EXCELDR35V
TPP5
C9327 0.01
IC9306 SI-3120CA
+12V STABILIZER
L9312 EXCELDR35V
TPP6
C9322 25V 220
C9323 0.01
D9315 MA5130
IC9307 SI-3050CA
TPP7
C9325 16V 1
D9316 MA5150
R9312 1.27k 1%
R9313 150
R9314 1.65k 1%
C9324 25V 220
R9316 1k
Q9304 2SD601ATX
R9317 100
R9318 2.87k 1%
FAN CONTROL SIGNAL AMP
+10/12V CONTROL/STABILIZER
R9315 4.7k
IC9308 SI-3120CA
+17.5V STABILIZER
L9313 EXCELDR35V
TPP8
C9329 0.01
C9328 35V 220
D9317 MA5200
R9319 1.1k 1%
R9320 3k 1%
+12V
FAN10-12V
GND
STBY+5V
+5V
+5V
MOTOR+5V
GND
-7V
GND
+17.5V
GND
P3 TO A-P.C.B. (A10)
P5 TO J-P.C.B. (J1)
+12V
GND
STBY+5V
+5V
GND
AUDIO +10V
FAN CONTROL
FAN ON/OFF
STBY(Low)/MAIN(Hi)
GND
DOWN
P4 TO A-P.C.B. (A8)

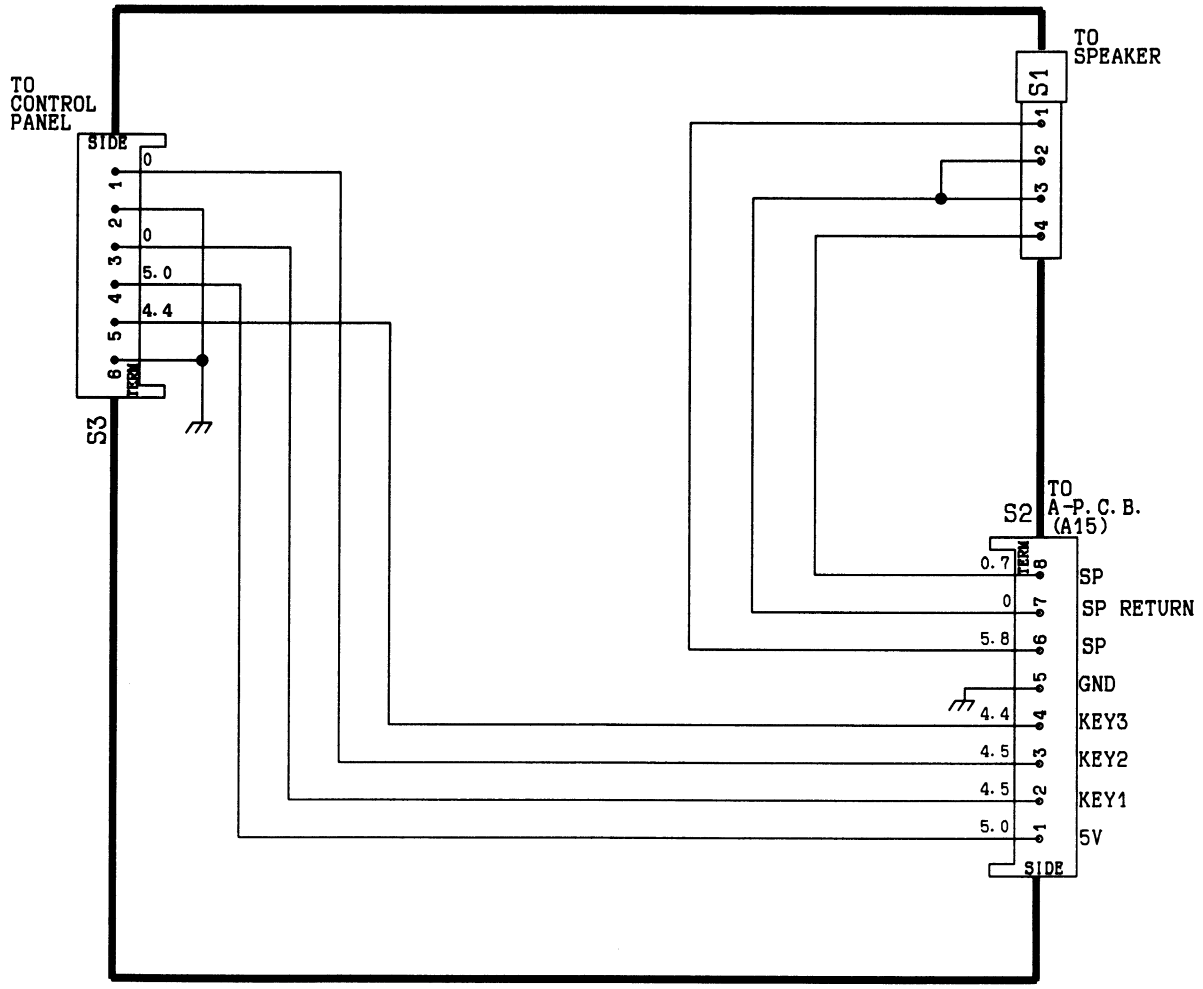

J-P.C. BOARD TXN/J1VHP4
JK7510
RGB OUT
IC7505
AD8073JR
RGB AMP
Q7517~Q7520
BUFFER
Q7521~Q7530 RGB1 SYNC SIGNAL LEBEL ADJ.
JK7501
RGB1 IN
IC7501
24LC21T-I/SN
PLUG & PLAY
JK7502
RGB2 IN
IC7503
BA7657F
RGB1,2 INPUT SIGNAL SELECTOR
Q7531~Q7540 RGB2 SYNC SIGNAL LEBEL ADJ.
IC7502
24LC21T-I/SN
PLUG & PLAY
IC7504
NJM2229M-TE1
NO SIGNAL DETECT
JK7503
TJS2A9010
S-VIDEO IN
JK7504
TJBA071
VIDEO & AUDIO IN
JK7505
TJS9A8061
RGB1 AUDIO IN
JK7506
TJS9A8061
RGB2 AUDIO IN
TO F-P.C.B. (F2)
TO P-P.C.B. (P5)
TO A-P.C.B. (A9)
J1
J2
J3
0.7Vp-p 20μs/div
0.6Vp-p 20μs/div
4.8Vp-p 10ms/div
4.6Vp-p 20μs/div
0.4Vp-p 20μs/div
0.9Vp-p 20μs/div
IC7701
TWM70001S010
REMOTE CONTROL MOUSE SIGNAL CONVERT MOUSE CONTROL SIGNAL
IC7703
TWM70001S010
MOUSE CONTROL SIGNAL CONVERT MOUSE SIGNAL
IC7704
UPD4721GS
5V→12V VOLTAGE CONVERTER
Q7701 BUFFER
Q7702 INVERTER
Q7752 INVERTER
Q7704
IMPEADANCE CONVERTER
IC7702
MN1382R
RESET
Q7703 BUFFER
Q7705 MOUSE CONTROL SIGNAL INVERTER
Q7706 SERIAL/MOUSE DISCRIMINATE SIGNAL INVERTER
JK7507
SERIAL
JK7508
TJSF21513
MOUSE
IC7601
MC14052BF
AUDIO IN SELECTOR
Q7602 INVERTER
Q7601 INVERTER
IC7602
M51132L
VOL/BALANCE ADJ.
IC7603
XRA15218F
AMP
Q7603 MUTE
Q7604 MUTE
Q7606, Q7801, Q7802 IMPEADANCE CONVERTER
Q7605 INVERTER
IC7801
AN7147N
AUDIO AMP
Q7805 MUTE
Q7806 MUTE
JK7509
TJS9A8061
AUDIO OUT
R-P.C. BOAR
RM7901
TNQ10483
S-P.
TO CONTROL PANEL
SIDE
S3


TO P-P.C.B. (P5)
J1
TO A-P.C.B. (A9)
J3
JK7507
SERIAL
JK7508
TJSF21513
MOUSE
IC7701
TWM700016010
REMOTE CONTROL MOUSE SIGNAL CONVERT MOUSE CONTROL SIGNAL
IC7703
TWM700015010
MOUSE CONTROL SIGNAL CONVERT MOUSE SIGNAL
IC7704
UPD4721GS
5V→±12V VOLTAGE CONVERTER
Q7701 2SB709AQRS BUFFER
Q7752 2SD601AQRS INVERTER
Q7702 2SD601AQRS INVERTER
Q7704 2SD601AQRS
IMPEADANCE CONVERTER
IC7702
MN1382R RESET
Q7703 2SB709AQRS BUFFER
Q7705 2SD601AQRS MOUSE CONTROL SIGNAL INVERTER
Q7706 2SD601AQRS
SERIAL/MOUSE DISCRIMINATE SIGNAL INVERTER
IC7801 AN7147N AUDIO AMP
IC7601
MC14052BF
AUDIO IN SELECTOR
IC7602 VOL/BALANCE ADJ.
M51132L
IC7603 XRA15218F
AMP
Q7605 2SD601AQRS INVERTER
Q7606 2SB709AQRS
Q7606, Q7801, Q7802 IMPEADANCE CONVERTER
Q7603 2SD601AQRS MUTE
Q7604 2SD601AQRS MUTE
Q7602 2SD601AQRS INVERTER
Q7601 2SD601AQRS INVERTER
Q7801 2SD601AQRS
Q7802 2SD601AQRS
Q7805 2SD601AQRS MUTE
Q7806 2SD601AQRS MUTE
0.7Vp-p 20 μs/div
0.6Vp-p 20 μs/div
JK7509
TJS9A8061
AUDIO OUT

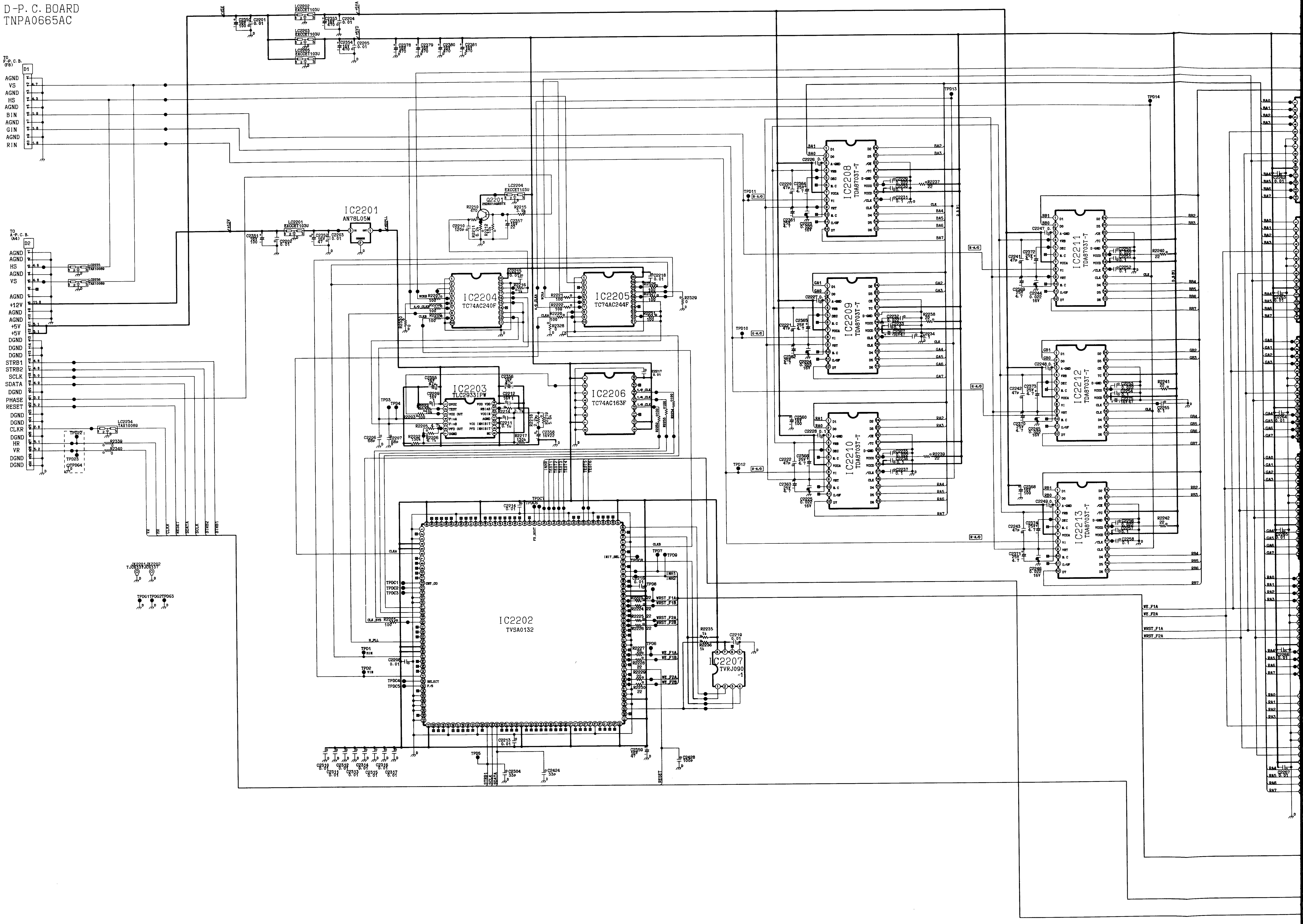
R-P.C. BOARD TNPA1107AA

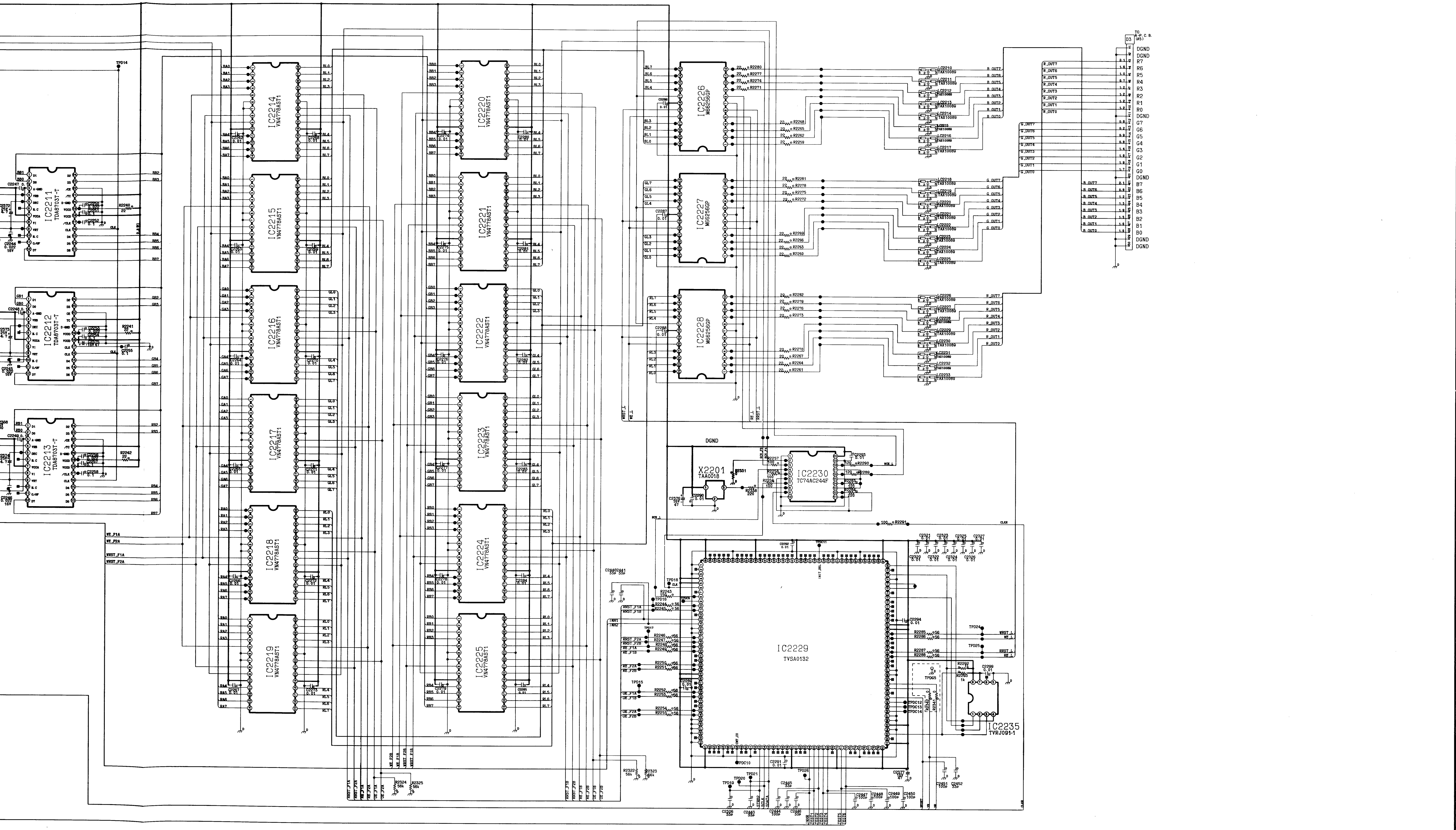

JK7901
TJC6137
RM7901
TNQ10483
Vout
Vcc
GND
C7901 0.01
C7902 16V 33
D7901 MA152K
D7905 MA152K
R7901 100
R7902 1k
Q7902 2SD601AQRS
R7905 1k
STB+5V
C7903 16V 47
C7904 0.01
R7906 330
R7907 330
D7902 SEL1110RLF38
D7903 SEL1110RLF38
LAMP
TEMP
R7908 220
D7904 LN11WP38CF4
POWER
R7909 100
TOP
GND
REMOTE
GND
STB5V
GND
LAMP LED
TEMP LED
POWER-R
POWER-G
GND
R1
TO A-P.C.B. (A11)
4.0
5.0
3.4
3.5
0
0

S-P.C. BOARD TNPA0673AA

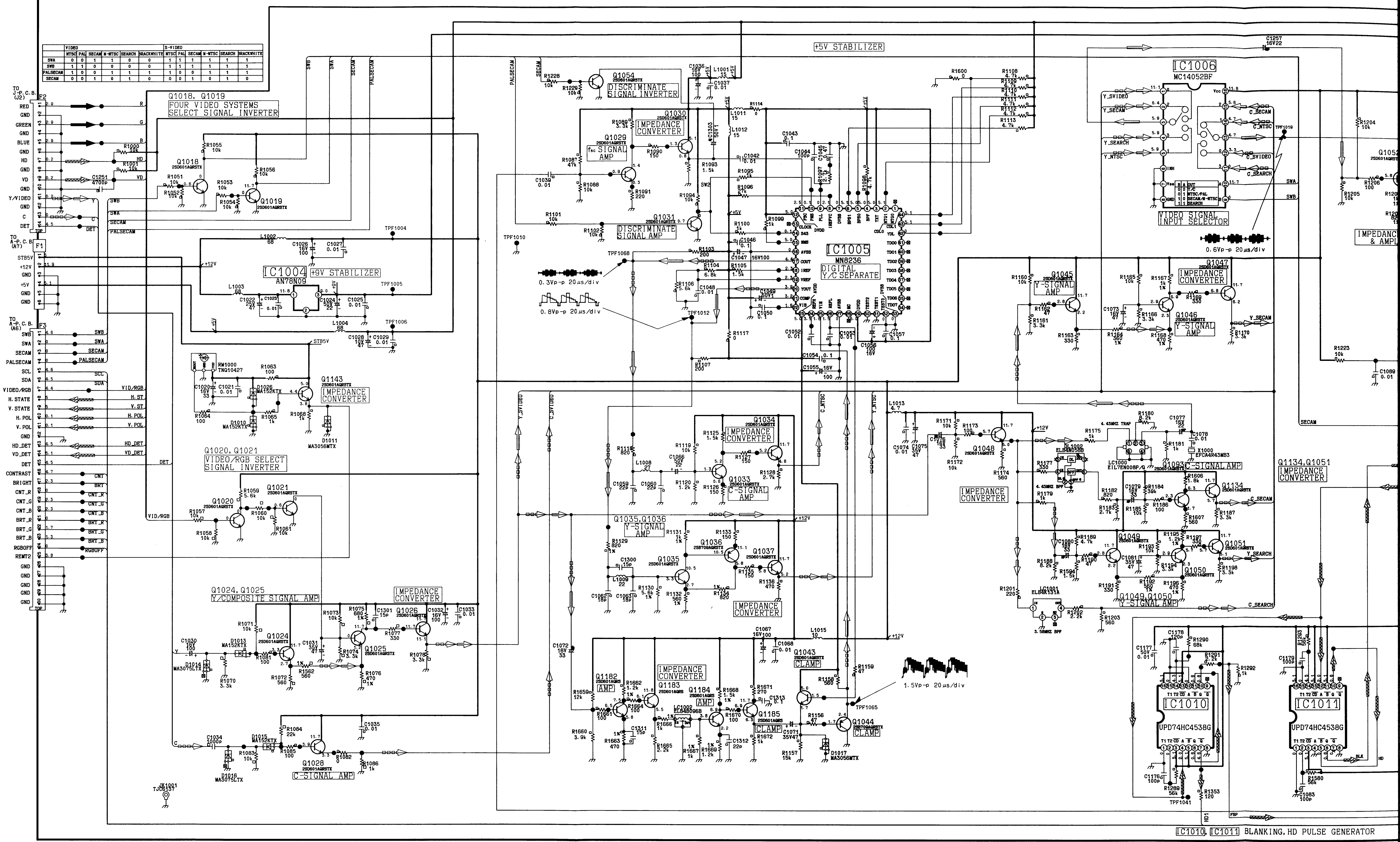

TO SPEAKER
S1
TO CONTROL PANEL
SIDE
TERM
S3
0
0
5.0
4.4
S2
TO A-P.C.B. (A15)
0.7
0
5.8
4.4
4.5
4.5
5.0
SP
SP RETURN
SP
GND
KEY3
KEY2
KEY1
5V

D-P.C. BOARD
TNPA0665AC


TO P-P.C.B. (P8)
D1
AGND
VS
AGND
HS
AGND
BIN
AGND
GIN
AGND
RIN
TO A-P.C.B. (A4)
D2
AGND
AGND
HS
AGND
VS
AGND
+12V
AGND
AGND
+5V
+5V
DGND
DGND
DGND
STRB1
STRB2
SCLK
SDATA
DGND
PHASE
RESET
DGND
DGND
CLKR
DGND
HR
VR
DGND
DGND
IC2201
AN78L05M
Q2201
IC2202
TVSA0132
IC2203
TLC2933IPW
IC2204
TC74AC240F
IC2205
TC74AC244F
IC2206
TC74AC163F
IC2207
TVRJ090-1
IC2208
TDA8703T-T
IC2209
TDA8703T-T
IC2210
TDA8703T-T
IC2211
TDA8703T-T
IC2212
TDA8703T-T
IC2213
TDA8703T-T
LC2201
LC2202
LC2203
LC2204
LC2205
LC2206
LC2234
EXCCET103U
TAX10089
TPD1
TPD2
TPD3
TPD4
TPD5
TPD6
TPD7
TPD8
TPD9
TPD10
TPD11
TPD12
TPD13
TPD14
WE_F1A
WE_F2A
WRST_F1A
WRST_F2A

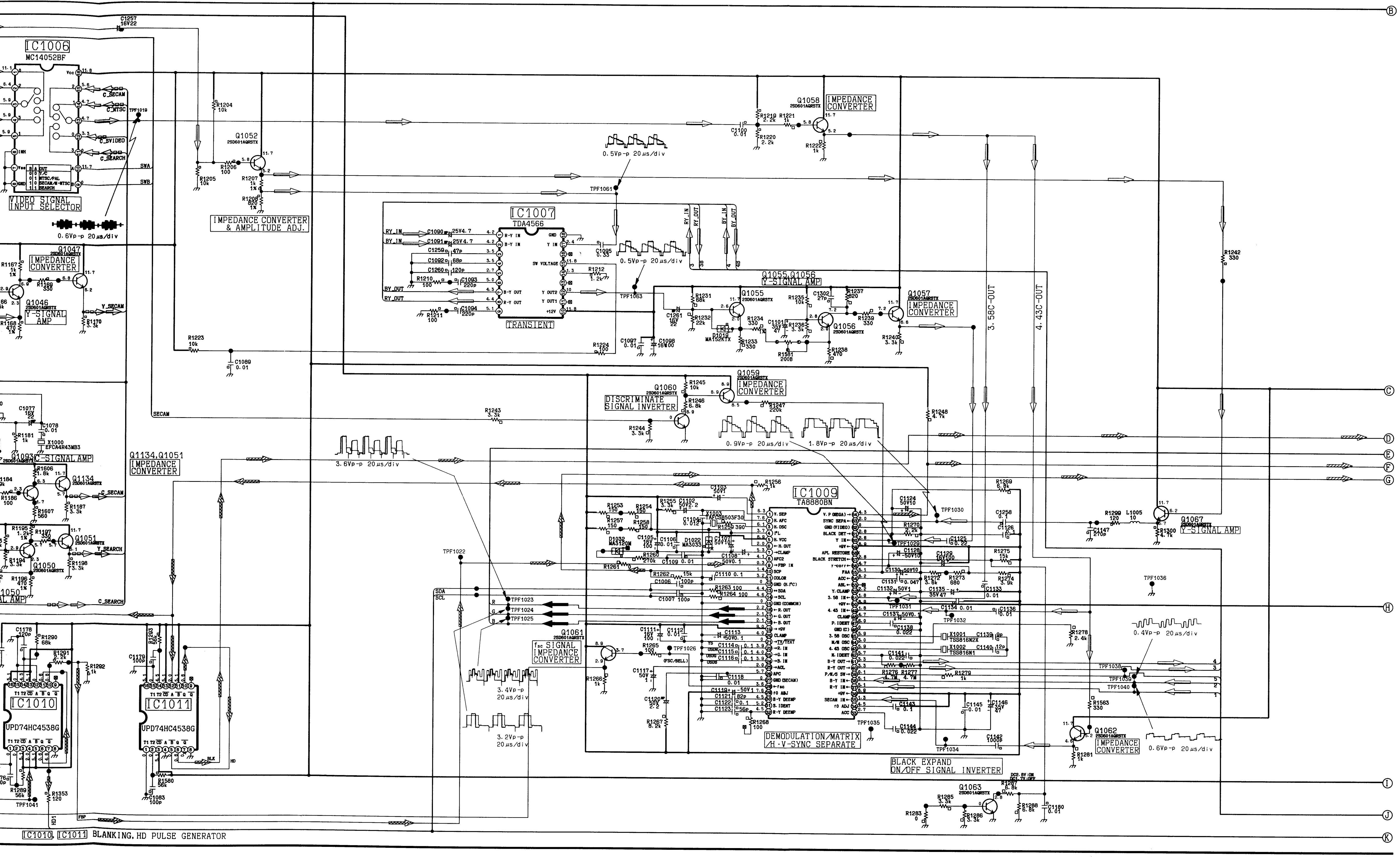

IC2211
TDA8703T-T
IC2212
TDA8703T-T
IC2213
TDA8703T-T
IC2214
VN4778AST1
IC2215
VN4778AST1
IC2216
VN4778AST1
IC2217
VN4778AST1
IC2218
VN4778AST1
IC2219
VN4778AST1
IC2220
VN4778AST1
IC2221
VN4778AST1
IC2222
VN4778AST1
IC2223
VN4778AST1
IC2224
VN4778AST1
IC2225
VN4778AST1
IC2226
M66256P
IC2227
M66256P
IC2228
M66256P
X2201
TAA0018
IC2230
TC74AC244F
IC2229
TVSA0132
IC2235
TVRJ091-1
DGND
TPD14
TO P.C.B. (A5)
D3
DGND
DGND
R7
R6
R5
R4
R3
R2
R1
R0
DGND
G7
G6
G5
G4
G3
G2
G1
G0
DGND
B7
B6
B5
B4
B3
B2
B1
B0
DGND
DGND
WE_F1A
WE_F2A
WRST_F1A
WRST_F2A
CLKR

F-P.C. BOARD TNPA1104AA

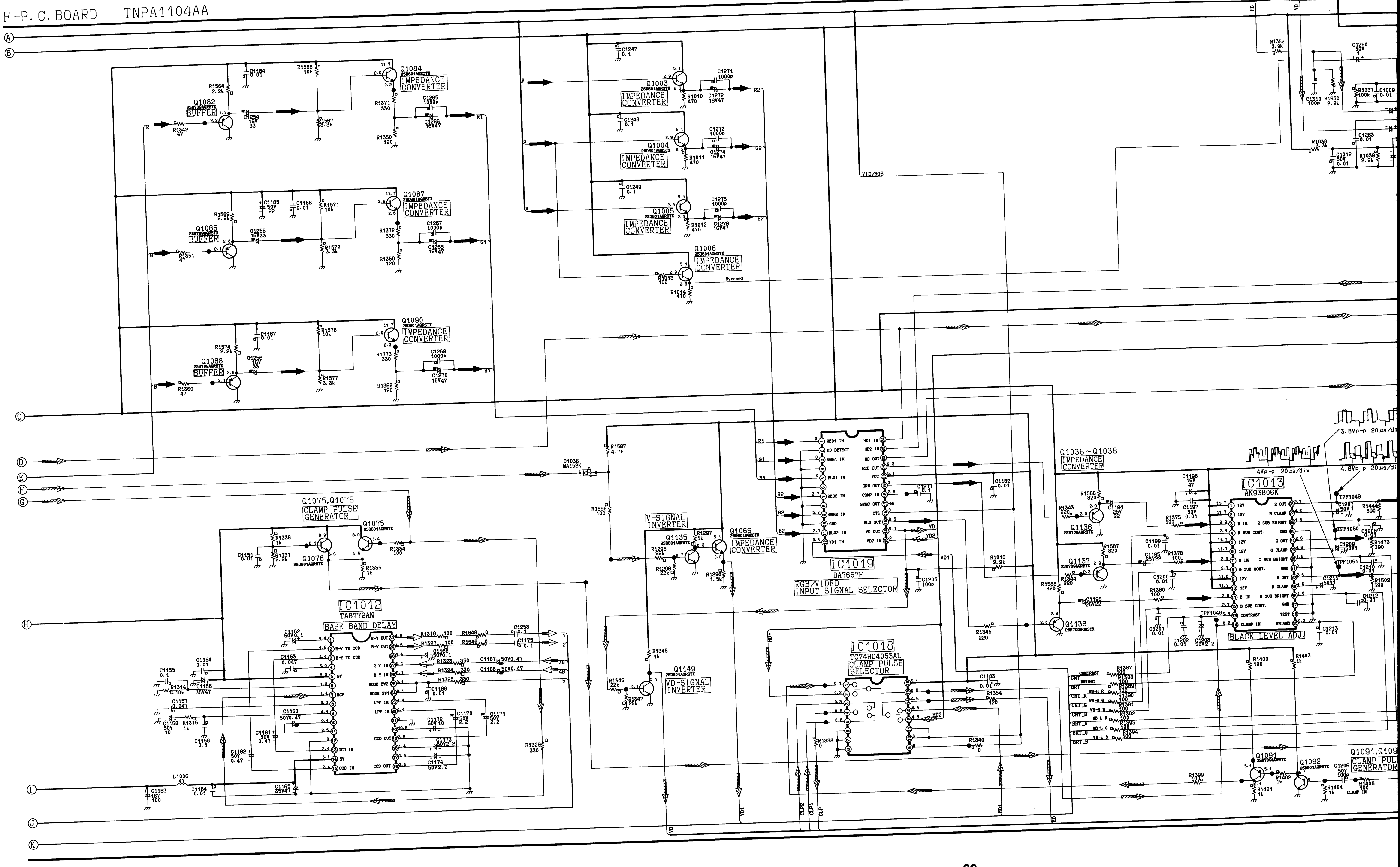


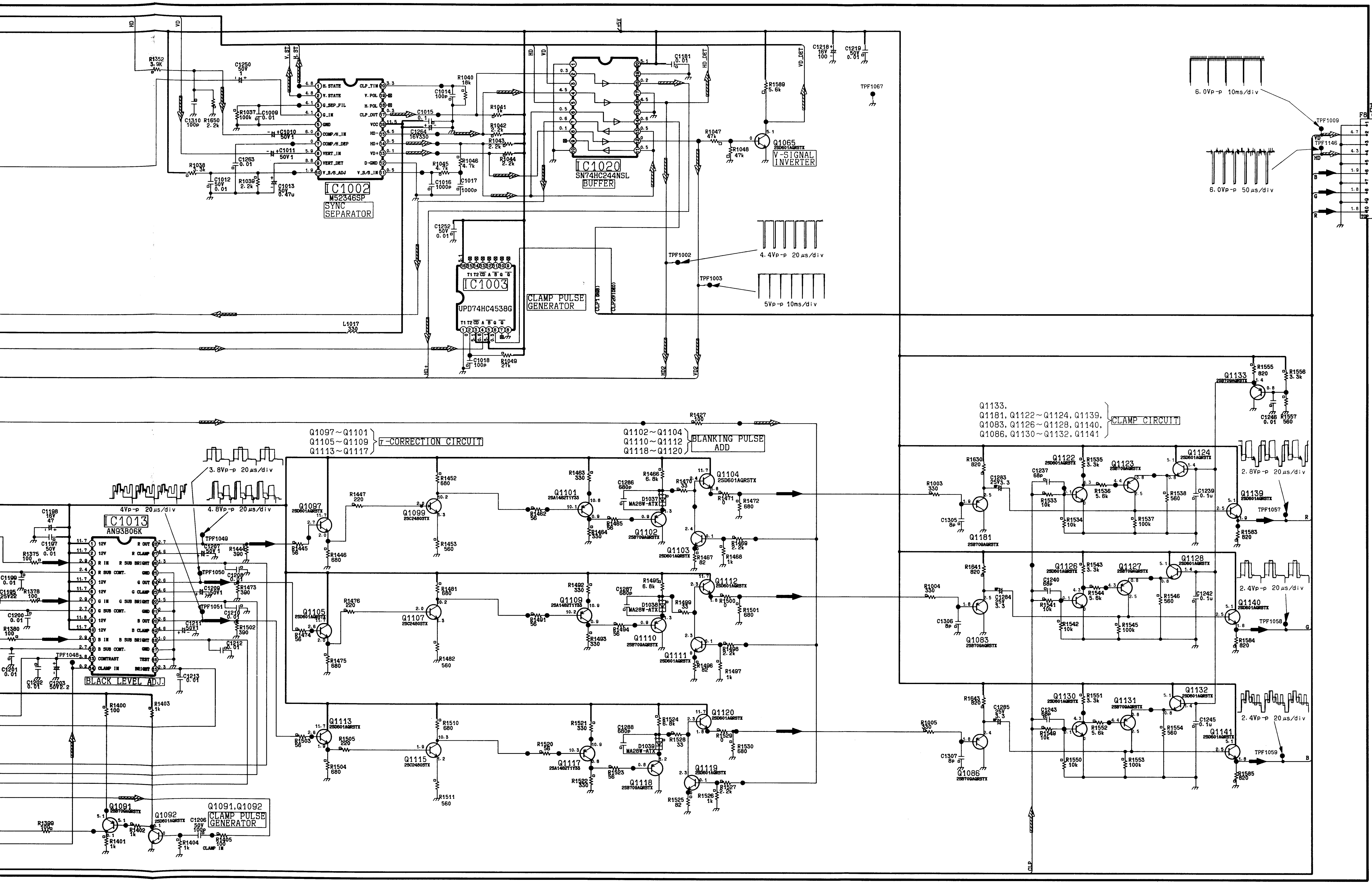
	VIDEO						S-VIDEO					
	NTSC	PAL	SECAM	M-NTSC	SEARCH	BRACKWHITE	NTSC	PAL	SECAM	M-NTSC	SEARCH	BRACKWHITE
SWA	0	0	1	1	0	0	1	1	1	1	1	1
SWB	1	1	0	0	0	0	1	1	1	1	1	1
PALSECAM	1	0	0	1	1	1	1	0	0	1	1	1
SECAM	0	0	1	0	1	0	0	0	1	0	1	0

TO J-P.C.B. (J2)
F2
RED
GND
GREEN
BLUE
HD
VD
Y/VIDEO
C
DET
TO A-P.C.B. (A7)
F1
STB5V
+12V
+5V
TO A-P.C.B. (A6)
F3
SWB
SWA
SECAM
PALSECAM
SCL
SDA
VIDEO/RGB
H.STATE
V.STATE
H.POL
V.POL
HD_DET
VD_DET
CONTRAST
BRIGHT
CNT_R
CNT_G
CNT_B
BRT_R
BRT_G
BRT_B
RGBOFF
REMT2
Q1018, Q1019
FOUR VIDEO SYSTEMS SELECT SIGNAL INVERTER
IC1004 +9V STABILIZER
AN78N09
Q1143 IMPEDANCE CONVERTER
RM1000 TNQ10427
Q1020, Q1021
VIDEO/RGB SELECT SIGNAL INVERTER
Q1024, Q1025
Y/COMPOSITE SIGNAL AMP
Q1026 IMPEDANCE CONVERTER
Q1028 C-SIGNAL AMP
JK1001 TJC6137
Q1054 DISCRIMINATE SIGNAL INVERTER
Q1030 IMPEDANCE CONVERTER
Q1029 fsc SIGNAL AMP
Q1031 DISCRIMINATE SIGNAL AMP
+5V STABILIZER
IC1005 MN8236 DIGITAL Y/C SEPARATE
0.3Vp-p 20μs/div
0.8Vp-p 20μs/div
Q1034 IMPEDANCE CONVERTER
Q1033 C-SIGNAL AMP
Q1035, Q1036 Y-SIGNAL AMP
Q1037 IMPEDANCE CONVERTER
Q1182 AMP
Q1183 IMPEDANCE CONVERTER
Q1184 AMP
Q1185 CLAMP
Q1043 CLAMP
Q1044 CLAMP
1.5Vp-p 20μs/div
IC1006 MC14052BF
VIDEO SIGNAL INPUT SELECTOR
0.6Vp-p 20μs/div
Q1045 Y-SIGNAL AMP
Q1046 Y-SIGNAL AMP
Q1047 IMPEDANCE CONVERTER
Q1048 IMPEDANCE CONVERTER
Q1093 C-SIGNAL AMP
Q1134, Q1051 IMPEDANCE CONVERTER
Q1049, Q1050 Y-SIGNAL AMP
IMPEDANCE & AMPL
IC1010 UPD74HC4538G
IC1011 UPD74HC4538G
IC1010, IC1011 BLANKING, HD PULSE GENERATOR

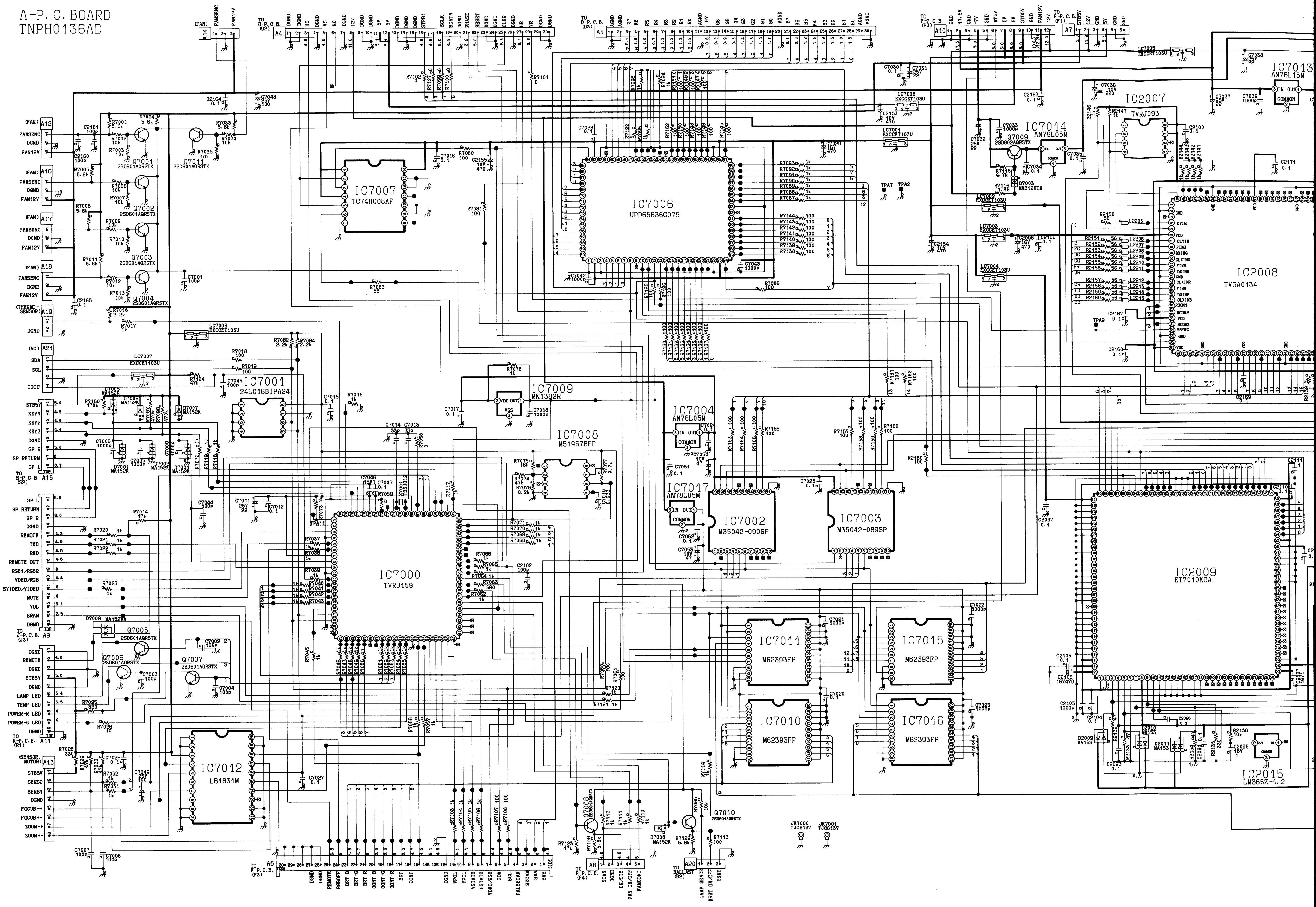

IC1006
MC14052BF
VIDEO SIGNAL INPUT SELECTOR
C_SECAM
C_NTSC
C_SVIDEO
C_SEARCH
SWA
SWB
TPF1019
0.6Vp-p 20µs/div
Q1052
IMPEDANCE CONVERTER & AMPLITUDE ADJ.
Q1047
IMPEDANCE CONVERTER
Q1046
Y-SIGNAL AMP
Y_SECAM
SECAM
Q1093 C-SIGNAL AMP
X1000
Q1134
Q1134,Q1051 IMPEDANCE CONVERTER
Q1051
Q1050
Y_SEARCH
C_SEARCH
IC1007
TDA4566
TRANSIENT
RY_IN
BY_IN
BY_OUT
RY_OUT
0.5Vp-p 20µs/div
TPF1061
TPF1063
Q1055,Q1056 Y-SIGNAL AMP
Q1055
Q1056
Q1057 IMPEDANCE CONVERTER
Q1058 IMPEDANCE CONVERTER
3.58C-OUT
4.43C-OUT
Q1059 IMPEDANCE CONVERTER
Q1060 DISCRIMINATE SIGNAL INVERTER
0.9Vp-p 20µs/div
1.8Vp-p 20µs/div
3.6Vp-p 20µs/div
IC1009
TA8880BN
DEMODULATION/MATRIX /H·V-SYNC SEPARATE
TPF1022
TPF1023
TPF1024
TPF1025
SDA
SCL
Q1061 fsc SIGNAL IMPEDANCE CONVERTER
3.4Vp-p 20µs/div
3.2Vp-p 20µs/div
X1001
X1002
TPF1029
TPF1030
TPF1031
TPF1032
TPF1034
TPF1035
TPF1036
TPF1038
TPF1039
TPF1040
Q1067 Y-SIGNAL AMP
0.4Vp-p 20µs/div
Q1062 IMPEDANCE CONVERTER
0.6Vp-p 20µs/div
BLACK EXPAND ON/OFF SIGNAL INVERTER
Q1063
IC1010
UPD74HC4538G
IC1011
UPD74HC4538G
TPF1041
HD1
FBP
BLK
HD
A
B
C
D
E
F
G
H
I
J
K
IC1010, IC1011 BLANKING, HD PULSE GENERATOR

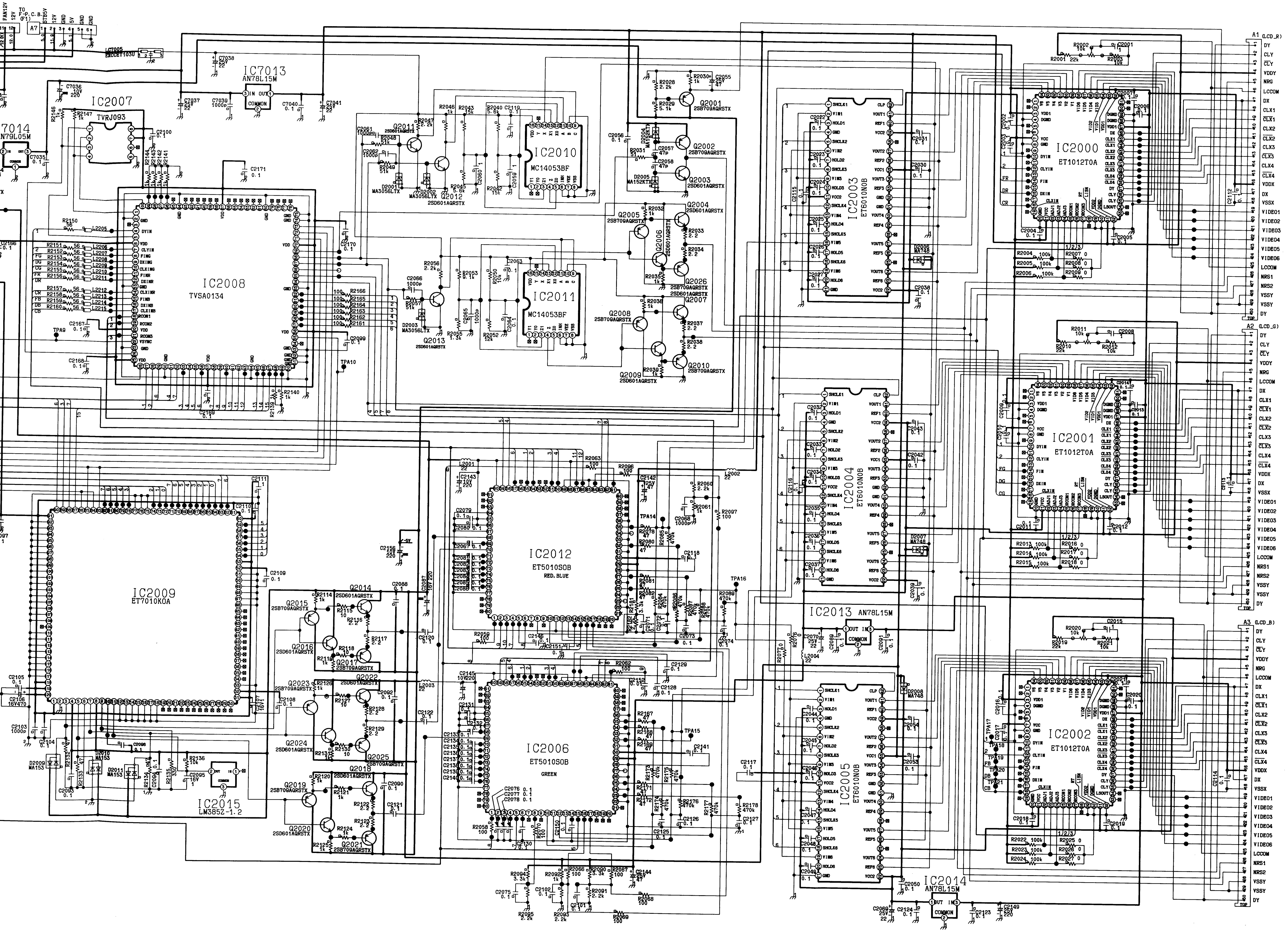
F-P. C. BOARD TNPA1104AA


Ⓐ
Ⓑ
Ⓒ
Ⓓ
Ⓔ
Ⓕ
Ⓖ
Ⓗ
Ⓘ
Ⓙ
Ⓚ
Q1082 2SB709AQRSTX BUFFER
Q1084 2SD601AQRSTX IMPEDANCE CONVERTER
Q1085 2SB709AQRSTX BUFFER
Q1087 2SD601AQRSTX IMPEDANCE CONVERTER
Q1088 2SB709AQRSTX BUFFER
Q1090 2SD601AQRSTX IMPEDANCE CONVERTER
Q1003 2SD601AQRSTX IMPEDANCE CONVERTER
Q1004 2SD601AQRSTX IMPEDANCE CONVERTER
Q1005 2SD601AQRSTX IMPEDANCE CONVERTER
Q1006 2SD601AQRSTX IMPEDANCE CONVERTER
SynconG
VID/RGB
Q1075,Q1076 CLAMP PULSE GENERATOR
Q1075 2SD601AQRSTX
Q1076 2SD601AQRSTX
IC1012 TA8772AN BASE BAND DELAY
V-SIGNAL INVERTER
Q1135 2SD601AQRSTX
Q1066 2SD601AQRSTX IMPEDANCE CONVERTER
Q1149 2SD601AQRSTX VD-SIGNAL INVERTER
D1036 MA152K
IC1019 BA7657F RGB/VIDEO INPUT SIGNAL SELECTOR
IC1018 TC74HC4053AL CLAMP PULSE SELECTOR
Q1036~Q1038 IMPEDANCE CONVERTER
Q1136 2SB709AQRSTX
Q1137 2SB709AQRSTX
Q1138 2SB709AQRSTX
IC1013 AN5306K BLACK LEVEL ADJ.
Q1091 2SB709AQRSTX
Q1092 2SD601AQRSTX
Q1091,Q109 CLAMP PUL GENERATOR
3.8Vp-p 20µs/div
4Vp-p 20µs/div
4.8Vp-p 20µs/div
TPF1048
TPF1049
TPF1050
TPF1051
CONTRAST
BRIGHT
WB-H R
WB-H G
WB-H B
WB-L R
WB-L G
WB-L B
VD
VD1
VD2
HD
HD1
HD2
CLP
CLP1
CLP2
R1
G1
B1
R2
G2
B2

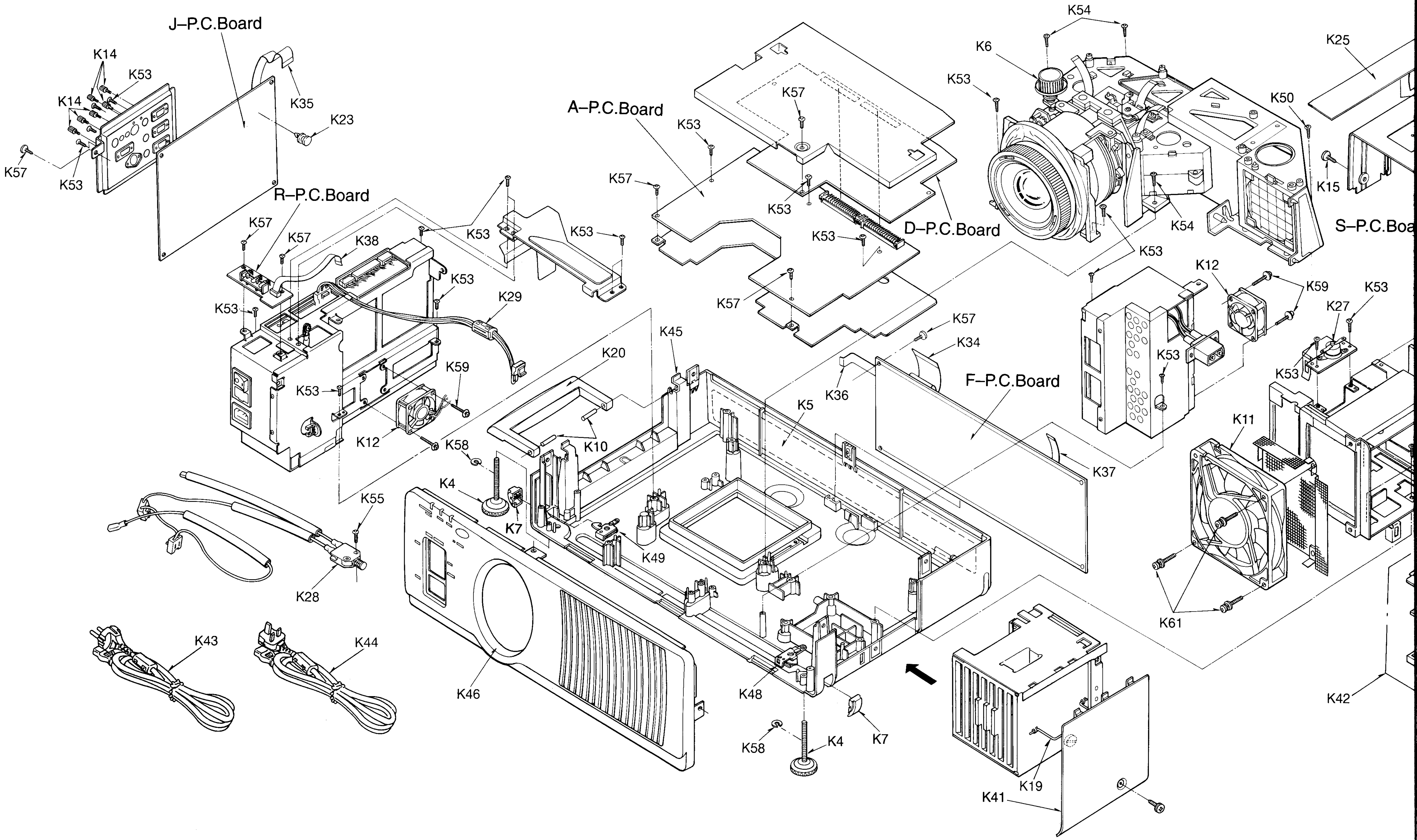

HD
VD
+5V
V.ST
H.ST
R1352 3.9K
C1250 50V 1
C1310 100p
R1650 2.2k
R1037 100k
C1009 0.01
C1010 50V1
C1011 50V1
C1263 0.01
R1038 3.3k
C1012 50V 0.01
R1039 2.2k
C1013 50V 0.47u
H.STATE
V.STATE
G_SEP_FIL
G_IN
GND
COMP/H_IN
COMP/H_DEP
VERT_IN
VERT_DET
V_S/S_ADJ
CLP_TIM
V.POL
H.POL
CLP_OUT
VCC
HD-
HD+
VD+
D-GND
V_S/S_IN
IC1002
M52346SP
SYNC SEPARATOR
C1014 100p
R1040 18k
C1015 0.1
C1264 16V330
R1041 1k
R1042 2.2k
R1043 2.2k
R1044 2.2k
R1045 4.7k
R1046 4.7k
C1016 1000p
C1017 1000p
IC1020
SN74HC244NSL
BUFFER
C1181 0.01
HD_DET
VD_DET
R1589 5.6k
R1047 47k
R1048 47k
Q1065 2SD601AQRSTX
V-SIGNAL INVERTER
C1218 16V 100
C1219 50V 0.01
TPF1067
C1252 50V 0.01
IC1003
UPD74HC4538G
CLAMP PULSE GENERATOR
CLP1(HD)
CLP2(VD)
C1018 100p
R1049 27k
L1017 330
HD1
HD2
VD2
TPF1002
4.4Vp-p 20μs/div
TPF1003
5Vp-p 10ms/div
6.0Vp-p 10ms/div
TPF1009
TPF1146
6.0Vp-p 50μs/div
TO D-P.C.B. (D1)
FB
GND
VS
GND
HS
GND
BLUE
GND
GREEN
GND
RED
TOP
Q1097~Q1101
Q1105~Q1109
Q1113~Q1117
γ-CORRECTION CIRCUIT
Q1102~Q1104
Q1110~Q1112
Q1118~Q1120
BLANKING PULSE ADD
Q1133, Q1181, Q1122~Q1124, Q1139, Q1083, Q1126~Q1128, Q1140, Q1086, Q1130~Q1132, Q1141
CLAMP CIRCUIT
3.8Vp-p 20μs/div
4Vp-p 20μs/div
4.8Vp-p 20μs/div
IC1013
AN93B06K
R OUT
R CLAMP
R IN
R SUB BRIGHT
R SUB CONT.
G OUT
G CLAMP
G IN
G SUB BRIGHT
G SUB CONT.
B OUT
B CLAMP
B IN
B SUB BRIGHT
B SUB CONT.
CONTRAST
CLAMP IN
BRIGHT
TEST
12V
GND
BLACK LEVEL ADJ.
TPF1048
TPF1049
TPF1050
TPF1051
C1198 16V 47
C1197 50V 0.01
R1375 100
C1199 0.01
C1195 25V22
R1378 100
C1200 0.01
R1380 100
C1201 0.01
C1202 0.01
C1203 50V2.2
C1213 0.01
R1400 100
R1403 1k
R1444 390
R1473 390
R1502 390
C1207 50V1
C1208 0.01
C1209 50V1
C1210 0.01
C1211 50V1
C1212 0.01
Q1097 2SD601AQRSTX
R1445 56
R1446 680
R1447 220
Q1099 2SC2480STX
R1452 680
R1453 560
R1462 56
Q1101 2SA1462T1Y33
R1463 330
R1464 330
R1465 56
C1286 680p
R1466 6.8k
D1037 MA28W-ATX
Q1102 2SB709AQRSTX
R1470 33
Q1104 2SD601AQRSTX
R1471 0
R1472 680
Q1103 2SD601AQRSTX
R1467 82
R1468 1k
R1469 2.2k
R1427 100
Q1105 2SD601AQRSTX
R1474 56
R1475 680
R1476 220
Q1107 2SC2480STX
R1481 680
R1482 560
R1491 56
Q1109 2SA1462T1Y33
R1492 330
R1493 330
R1494 56
C1287 680p
R1495 6.8k
D1038 MA28W-ATX
Q1110 2SB709AQRSTX
R1499 33
Q1112 2SD601AQRSTX
R1500 0
R1501 680
Q1111 2SD601AQRSTX
R1496 82
R1497 1k
R1498 2.2k
Q1113 2SD601AQRSTX
R1503 56
R1504 680
R1505 220
Q1115 2SC2480STX
R1510 680
R1511 560
R1520 56
Q1117 2SA1462T1Y33
R1521 330
R1522 330
R1523 56
C1288 680p
R1524 6.8k
D1039 MA28W-ATX
Q1118 2SB709AQRSTX
R1528 33
Q1120 2SD601AQRSTX
R1529 0
R1530 680
Q1119 2SD601AQRSTX
R1525 82
R1526 1k
R1527 2.2k
Q1091 2SB709AQRSTX
Q1092 2SD601AQRSTX
Q1091, Q1092
CLAMP PULSE GENERATOR
R1399 10k
R1401 1k
R1402 1k
C1206 50V 100p
R1404 1k
R1405 100
CLAMP IN
Q1133 2SB709AQRSTX
R1555 820
R1556 3.3k
C1248 0.01
R1557 560
R1003 330
R1630 820
C1283 25V3.3
C1305 8p
Q1181 2SB709AQRSTX
C1237 68p
R1533 10k
R1534 10k
Q1122 2SD601AQRSTX
R1535 3.3k
R1536 5.6k
Q1123 2SB709AQRSTX
R1537 100k
R1538 560
Q1124 2SD601AQRSTX
C1239 0.1u
Q1139 2SD601AQRSTX
R1583 820
TPF1057
R
2.8Vp-p 20μs/div
R1004 330
R1641 820
C1284 25V 3.3
C1306 8p
Q1083 2SB709AQRSTX
C1240 68p
R1541 10k
R1542 10k
Q1126 2SD601AQRSTX
R1543 3.3k
R1544 5.6k
Q1127 2SB709AQRSTX
R1545 100k
R1546 560
Q1128 2SD601AQRSTX
C1242 0.1u
Q1140 2SD601AQRSTX
R1584 820
TPF1058
G
2.4Vp-p 20μs/div
R1005 330
R1643 820
C1285 25V 3.3
C1307 8p
Q1086 2SB709AQRSTX
C1243 68p
R1549 10k
R1550 10k
Q1130 2SD601AQRSTX
R1551 3.3k
R1552 5.6k
Q1131 2SB709AQRSTX
R1553 100k
R1554 560
Q1132 2SD601AQRSTX
C1245 0.1u
Q1141 2SD601AQRSTX
R1585 820
TPF1059
B
2.4Vp-p 20μs/div
CLP

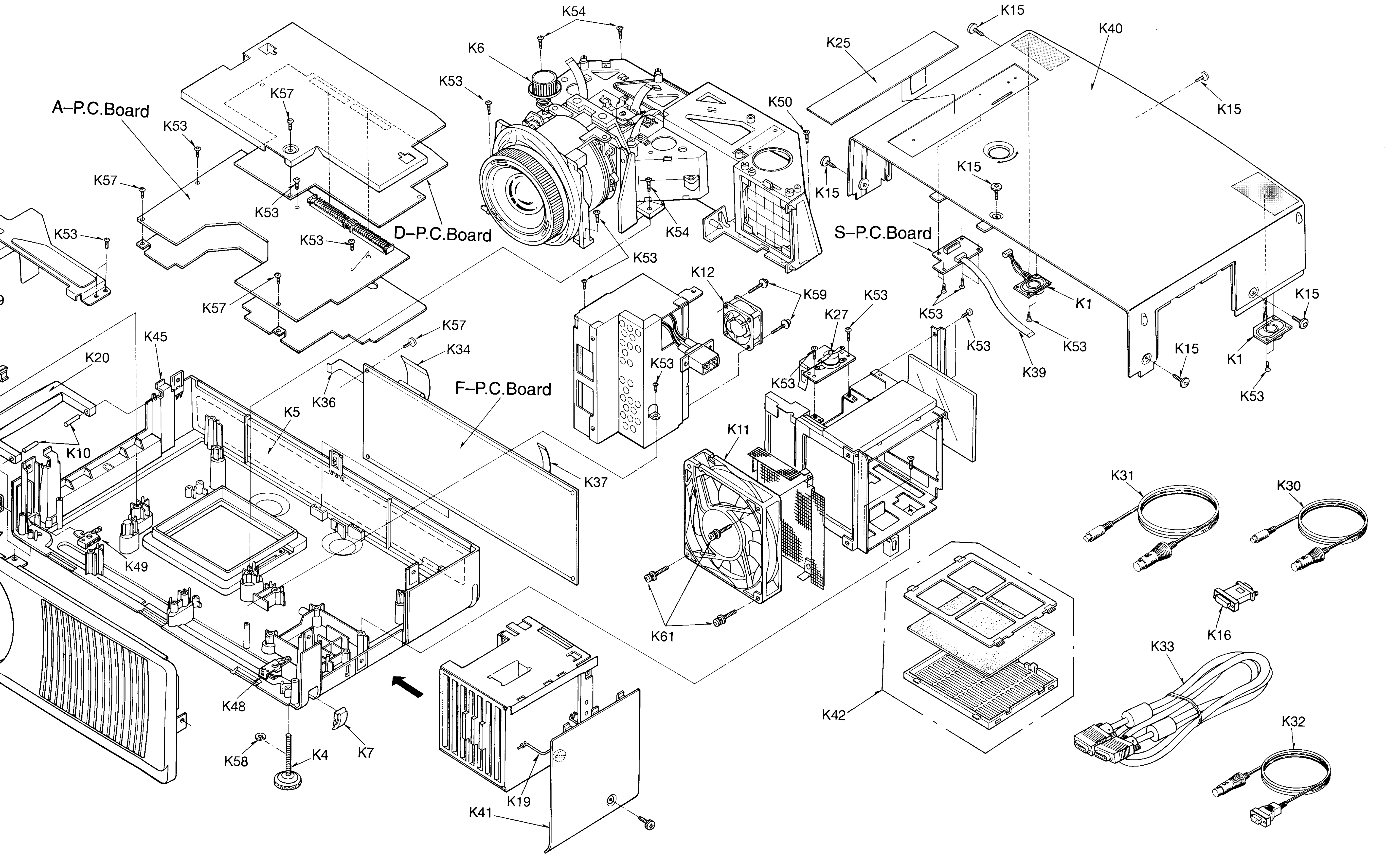
A-P.C. BOARD
TNPH0136AD


IC7000 TVRJ159
IC7001 24LC16BIPA24
IC7002 M35042-090SP
IC7003 M35042-089SP
IC7004 AN78L05M
IC7006 UPD65636G075
IC7007 TC74HC08AF
IC7008 M51957BFP
IC7009 MN1382R
IC7010 M62393FP
IC7011 M62393FP
IC7012 LB1831M
IC7013 AN78L15M
IC7014 AN79L05M
IC7015 M62393FP
IC7016 M62393FP
IC7017 AN78L05M
IC2007 TVRJ093
IC2008 TVSA0134
IC2009 ET7010K0A
IC2015 LM385Z-1.2
Q7001 2SD601AQRSTX
Q7002 2SD601AQRSTX
Q7003 2SD601AQRSTX
Q7004 2SD601AQRSTX
Q7005 2SD601AQRSTX
Q7006 2SD601AQRSTX
Q7007 2SD601AQRSTX
Q7008 2SD601AQRSTX
Q7009 2SD602AQRSTX
Q7010 2SD601AQRSTX
Q7011 2SD601AQRSTX
JK7000 TJC6137
JK7001 TJC6137
(FAN) A14 FANSENC FAN12V
TO D-P.C.B. (D2) A4
TO D-P.C.B. (D3) A5
TO P-P.C.B. (P3) A10
TO P-P.C.B. (P1) A7
(FAN) A12 FANSENC DGND FAN12V
(FAN) A16 FANSENC DGND FAN12V
(FAN) A17 FANSENC DGND FAN12V
(FAN) A18 FANSENC DGND FAN12V
(THERMO-SENSOR) A19 DGND
(NC) A21 SDA SCL IICC
STB5V KEY1 KEY2 KEY3 DGND SP R SP RETURN SP L
TO S-P.C.B. (S2) A15
SP L SP RETURN SP R DGND REMOTE TXD RXD REMOTE OUT RGB1/RGB2 VDEO/RGB SVIDEO/VIDEO MUTE VOL BRAN DGND
TO J-P.C.B. (J3) A9
DGND REMOTE DGND STB5V DGND LAMP LED TEMP LED POWER-R LED POWER-G LED DGND
TO R-P.C.B. (R1) A11
(SENSOR MOTOR) A13 STB5V SENS2 SENS1 DGND FOCUS-+ FOCUS+- ZOOM-+ ZOOM+-
TO F-P.C.B. (F3) A6
DGND DGND REMOTE RGBOFF BRT-B BRT-G BRT-R CONT-B CONT-G CONT-R BRT CONT DGND VPOL HPOL VSTATE HSTATE VIDEO/RGB SDA SCL PALSECAM SECAM SWA SWB
TO P-P.C.B. (P4) A8 SDWN DGND ON/STB FAN ON/OFF FANCONT
TO BALLAST (B2) A20 LAMP SENCE BRST ON/OFF DGND
TPA7 TPA2 TPA9
LC7001 LC7003 LC7004 LC7005 LC7006 LC7007 LC7008 EXCCET103U

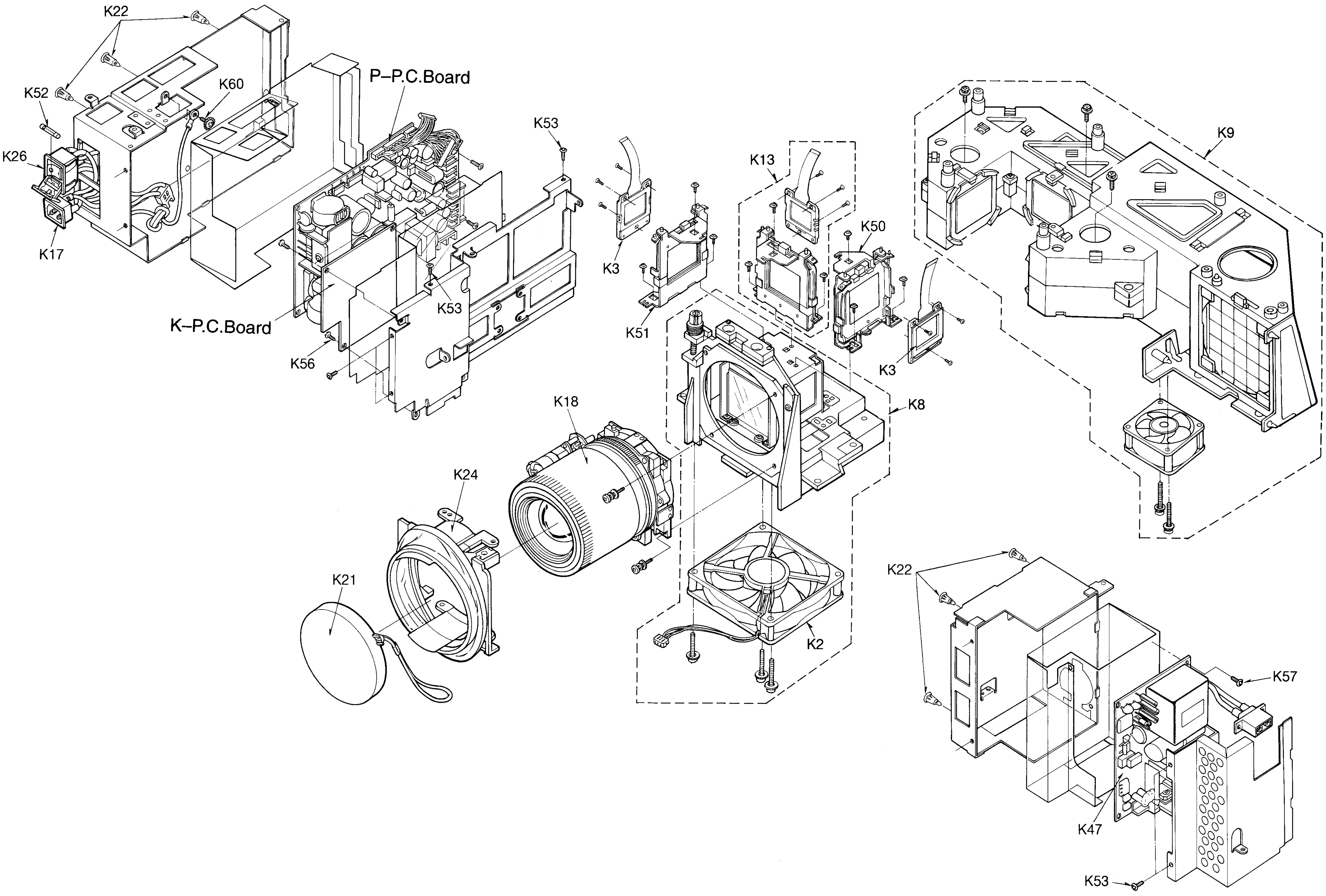

IC7013
AN78L15M
IC2007
TVRJ093
IC2008
TVSA0134
IC2010
MC14053BF
IC2011
MC14053BF
IC2003
ET6010N0B
IC2004
ET6010N0B
IC2005
ET6010N0B
IC2000
ET1012T0A
IC2001
ET1012T0A
IC2002
ET1012T0A
IC2009
ET7010K0A
IC2012
ET5010S0B
RED, BLUE
IC2006
ET5010S0B
GREEN
IC2013
AN78L15M
IC2014
AN78L15M
IC2015
LM385Z-1.2
A1 (LCD_R)
A2 (LCD_G)
A3 (LCD_B)
Q2001
Q2002
Q2003
Q2004
Q2005
Q2006
Q2007
Q2008
Q2009
Q2010
Q2011
Q2012
Q2013
Q2014
Q2015
Q2016
Q2017
Q2018
Q2019
Q2020
Q2021
Q2022
Q2023
Q2024
Q2025
Q2026
2SB709AQRSTX
2SD601AQRSTX
TPA9
TPA10
TPA14
TPA15
TPA16
TPA17
DY
CLY
VDDY
NRG
LCCOM
DX
CLX1
CLX2
CLX3
CLX4
VDDX
VSSX
VIDEO1
VIDEO2
VIDEO3
VIDEO4
VIDEO5
VIDEO6
NRS1
NRS2
VSSY
FAN12V
12V
TO P.C.B (F1)
STB5V
5V
GND

Exploded Views (1)


J–P.C.Board
K14
K53
K14
K57
K53
K35
K23
R–P.C.Board
K57
K57
K38
K53
K53
K53
K29
K59
K53
K12
K58
K55
K28
K43
K44
A–P.C.Board
K53
K57
K57
K53
K53
K57
D–P.C.Board
K45
K20
K10
K4
K7
K49
K46
K5
K36
K57
K34
F–P.C.Board
K37
K48
K58
K4
K7
K54
K6
K53
K25
K50
K15
K54
K53
S–P.C.Boa
K12
K59
K53
K27
K53
K53
K11
K61
K41
K19
K42


K54
K6
K53
K57
A–P.C.Board
K53
K57
K53
K53
D–P.C.Board
K53
K57
K53
K50
K54
K53
K15
K25
K40
K15
K15
K15
S–P.C.Board
K12
K59
K53
K27
K53
K53
K1
K53
K15
K39
K1
K53
K15
K45
K20
K10
K57
K34
K36
F–P.C.Board
K5
K53
K11
K37
K49
K61
K31
K30
K16
K33
K42
K32
K48
K58
K4
K7
K19
K41

Exploded Views (2)


K22
K52
K60
P–P.C.Board
K26
K17
K53
K53
K–P.C.Board
K56
K3
K51
K13
K50
K3
K9
K8
K18
K24
K21
K2
K22
K57
K47
K53

Comp
When

Abbreviation of Part

1. Resistor

Example:

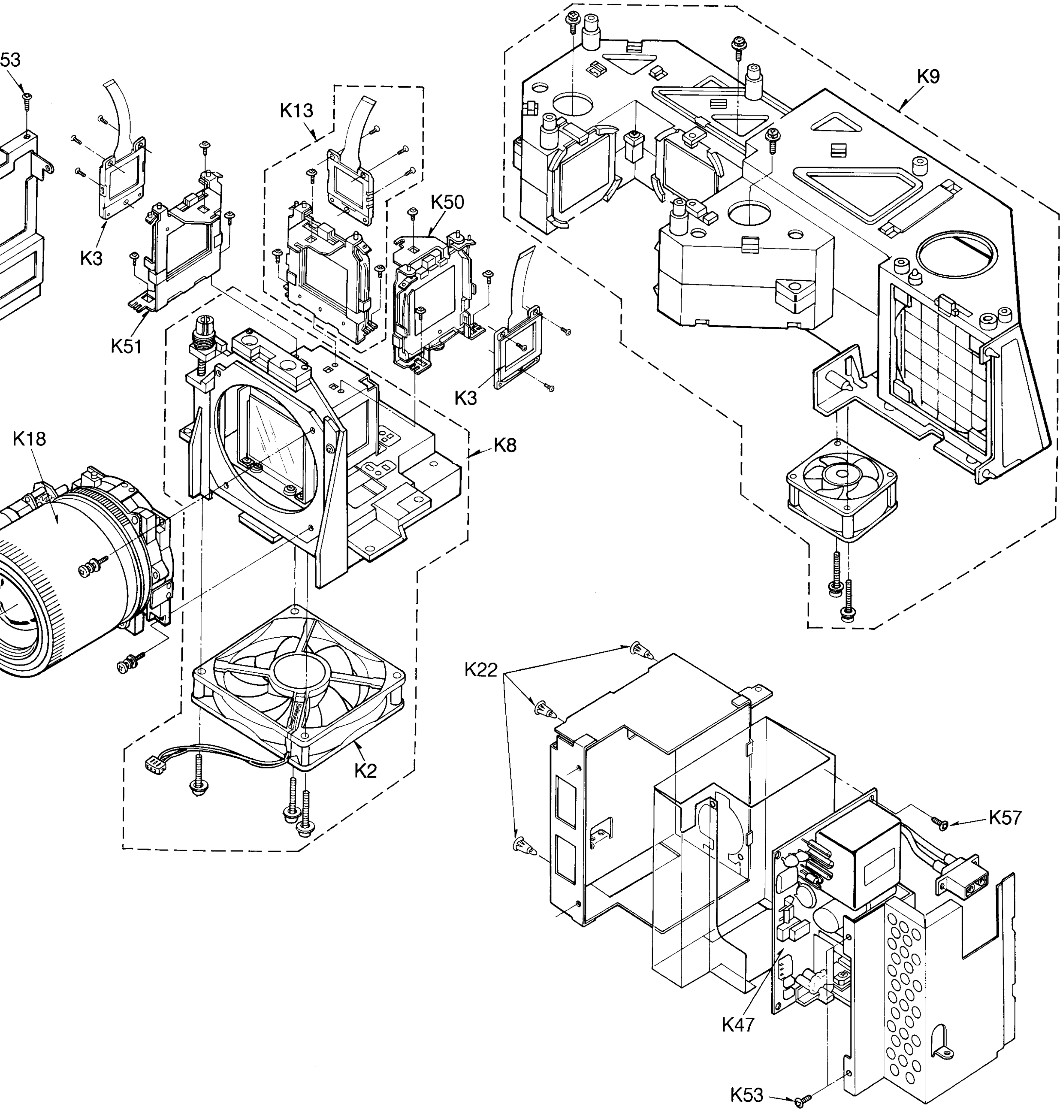
ERD25TJ104 C

TY

TYPE
C : Carbon
F : Fuse
M : Metal Ox Metal Fil
S : Solid
W: Wire Wo

Note: For G ○○ c
Printed circui

	Ref. No.	Part
		MECHAN
	K1	EAK4A03
⚠	K2	FBA09A1
	K3	P13SM01
	K4	TBLB001
	K5	TBMD120
	K5	TBMD135
	K6	TBXA092
	K7	TBXA093
	K8	TEDC000
	K9	TEEC000
	K10	TEJF008
⚠	K11	TEKH003
⚠	K12	TEKH008
	K13	TENC000
	G1	TES6348
	K14	THEC014
	K15	THEC017
	K16	TJSF270
	G2	TJS1A224
⚠	K17	TJS5A999
	K18	TKGF000
	K19	TKKB500
	K20	TKKB500
	K21	TKKL5025
	K22	TMME039
	K23	TMM2341
	G3	TMM5402
	G4	TMM7443
	G5	TMWJ006
	K24	TMZX000
	G6	TNQE003
	K25	TNXX012
	G7	TPCA403



REPLACEMENT PARTS LIST

Important Safety Notice

Components identified by the International symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Abbreviation of Part Name and Description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon F : Fuse M : Metal Oxide Metal Film S : Solid W: Wire Wound	F : ± 1 % G : ± 2 % J : ± 5 % K : ± 10 % M : ± 20 %

2. Capacitor

Example:

ECKF1H103ZF C 0.01PF, Z, 50V

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic E : Electrolytic P : Polyester PP: Polypropylene S : Styrol T : Tantalum	C : ± 0.25 pF D : ± 0.5 pF F : ± 1 pF J : ± 5 % K : ± 10 % L : ± 15 % M : ± 20 % P : + 100 %, – 0 % Z : + 80 %, – 20 %

Note: For G ○○ of Ref. No., not indicate illustration of it part on “Exploded Views”.
Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

	Ref. No.	Part No.	Description
		MECHANICAL PARTS	
	K1	EAK4A03A	SPEAKER
⚠	K2	FBA09A12H0	FAN
	K3	P13SM015	LIQUID CRYSTAL DISPLAY (R), (B)
	K4	TBLB0016-1	SET LEG
	K5	TBMD120	MODEL NAME PLATE (PT-L595E)
	K5	TBMD135	MODEL NAME PLATE (PT-L595EG)
	K6	TBXA09201	CONTROL KNOB
	K7	TBXA09301	SET LEG KNOB
	K8	TEDC0002-1	PRISM
	K9	TEEC0004	ANALYSIS BLOCK
	K10	TEJF008	HANDLE SHAFT
⚠	K11	TEKH003-1	FAN
⚠	K12	TEKH008	FAN
	K13	TENC0006	LIQUID CRYSTAL DISPLAY (G)
	G1	TES6348	SPRING
	K14	THEC014N	SCREW
	K15	THEC0179	SCREW
	K16	TJSF27000	MAC ADAPTER
	G2	TJS1A2240	IC SOCKET
⚠	K17	TJS5A9990	AC INLET
	K18	TKGF0009	LENS BLOCK
	K19	TKKB5003	LAMP BOX HANDLE
	K20	TKKB5009	HANDLE
	K21	TKKL5025	LENS COVER
	K22	TMME039	SPACER
	K23	TMM23416	SPACER
	G3	TMM5402-1	CLAMPER
	G4	TMM7443-3	CLAMPER
	G5	TMWJ006	LED HOLDER
	K24	TMZX0004-1	FILTER
	G6	TNQE003	REMOTE CONTROL
	K25	TNXX012	CONTROL SWITCH
	G7	TPCA40326	CARTON (PT-L595E)
	G8	TPCA40330	CARTON (PT-L595EG)
	G9	TPDA0123	CUSHION (UPPER)
	G10	TPDA0124	QUSHION (BOTTOM)
	G11	TPE114154	PROTECT COVER
	G12	TQBJ0012	INSTRUCTION BOOK
	G13	TQD1712010	LABEL
⚠	K26	TSEF8002	SWITCH (MAIN)
⚠	K27	TSEX0004	BIMETAL
⚠	K28	TSEX8005	SWITCH (INTERLOCK)
	K29	TSK1018	FERRITE CORE
	K30	TSXF096	CABLE (PS/2)
	K31	TSXF105	CABLE (MAC MOUSE)
	K32	TSXF106	CABLE (SERIAL MOUSE)
	K33	TSXF122	CABLE (VGA)
	K34	TSXL040	CABLE 30P (F3–A6)
	K35	TSXL041	CABLE 15P (J3–A9)
	K36	TSXL042	CABLE 14P (F2–J2)
	K37	TSXL043-1	CABLE 10P (D1–F8)
	K38	TSXL044	CABLE 10P (R1–A11)
	K39	TSXL045	CABLE 8P (S2–A15)
	K40	TXFKF99VWRZ	TOP COVER
	K41	TXFKK99VWRZ	LAMP COVER
	K42	TXFKL01VHP4	BOTTOM FILTER
⚠	K43	TXFSX02VTFZ	AC POWER CORD (PT-L595E)
⚠	K44	TXFSX02VTHZ	AC POWER CORD (PT-L595EG)
	K45	TXFTF98VWRZ	BOTTOM COVER
	K46	TXFTF99VWRZ	FRONT COVER
⚠	K47	TXN/B1VHP3	BALLAST UNIT
	K48	TXZGA01VHF6	SET LEG (R)
	K49	TXZGA02VHF6	SET LEG (L)
	K50	TZTEN01VHF6	ADJUSTMENT METAL (R)
	K51	TZTEN02VHF6	ADJUSTMENT METAL (B)
⚠	K52	XBA2C40TR0	FUSE 250V 4A
	K53	XTBT969Z	SCREW
	K54	XTB4+15AFZ	SCREW

	Ref. No.	Part No.	Description
	K55	XTB4+20A	SCREW
	G14	XTN25+6GFZ	SCREW
	K56	XTV3+6J	SCREW
	K57	XTW3+8T	TAPPING SCREW
	G15	XUC2	E RING
	K58	XUC3	E RING
	K59	XYN3+F25	SCREW
	G16	XYN3+F8	SCREW
	G17	XYN3+J8	SCREW
	K60	XYN4+E8	SCREW
	K61	XYN4+F32	SCREW
	G18	XZBT6506	POLY BAG

INTEGRATED CIRCUITS

	Ref. No.	Part No.	Description
	IC1002	M52346SP	LINEAR IC
	IC1003	UPD74HC4538G	MOS IC
	IC1004	AN78N09	LINEAR IC
	IC1005	MN8236	MOS IC
	IC1006	MC14052BF	MOS IC
	IC1007	TDA4566	LINEAR IC
	IC1009	TA8880BN	LINEAR IC
	IC1010	UPD74HC4538G	MOS IC
	IC1011	UPD74HC4538G	MOS IC
	IC1012	TA8772AN	LINEAR IC
	IC1013	AN93B06K	LINEAR IC
	IC1018	TC74HC4053AF	MOS IC
	IC1019	BA7657F	LINEAR IC
	IC1020	SN74HC244NS	MOS IC
	IC2000	ET1012T0A	LINEAR IC
	IC2001	ET1012T0A	LINEAR IC
	IC2002	ET1012T0A	LINEAR IC
	IC2003	ET6010N0B	LINEAR IC
	IC2004	ET6010N0B	LINEAR IC
	IC2005	ET6010N0B	LINEAR IC
	IC2006	ET5010S0B	LINEAR IC
	IC2007	TVRJ093	MOS IC
	IC2008	TVSA0134	MOS IC
	IC2009	ET7010K0A	LINEAR IC
	IC2010	MC14053BF	MOS IC
	IC2011	MC14053BF	MOS IC
	IC2012	ET5010S0B	LINEAR IC
	IC2013	AN78L15M	LINEAR IC
	IC2014	AN78L15M	LINEAR IC
	IC2015	LM385Z-1.2	I.C
	IC2201	AN78L05M	LINEAR IC
	IC2202	TVSA0132	MOS IC
	IC2203	TLC2933IPW	I.C
	IC2204	TC74AC240FEL	MOS IC
	IC2205	TC74AC244F	MOS IC
	IC2206	TC74AC163F	MOS IC
	IC2207	TVRJ090-1	MOS IC
	IC2208	TDA8703T-T	LINEAR IC
	IC2209	TDA8703T-T	LINEAR IC
	IC2210	TDA8703T-T	LINEAR IC
	IC2211	TDA8703T-T	LINEAR IC
	IC2212	TDA8703T-T	LINEAR IC
	IC2213	TDA8703T-T	LINEAR IC
	IC2214	MN4778AS	MOS IC
	IC2215	MN4778AS	MOS IC
	IC2216	MN4778AS	MOS IC
	IC2217	MN4778AS	MOS IC
	IC2218	MN4778AS	MOS IC
	IC2219	MN4778AS	MOS IC
	IC2220	MN4778AS	MOS IC
	IC2221	MN4778AS	MOS IC
	IC2222	MN4778AS	MOS IC
	IC2223	MN4778AS	MOS IC
	IC2224	MN4778AS	MOS IC
	IC2225	MN4778AS	MOS IC
	IC2226	M66256GP	MOS IC
	IC2227	M66256GP	MOS IC
	IC2228	M66256GP	MOS IC
	IC2229	TVSA0132	MOS IC
	IC2230	TC74AC244F	MOS IC
	IC2235	TVRJ091-1	MOS IC
	IC7000	TVRJ159	I.C
	IC7001	24LC16BIPA24	MOS IC
	IC7002	M35042-090SP	MOS IC
	IC7003	M35042-089SP	MOS IC
	IC7004	AN78L05M	LINEAR IC
	IC7006	UPD65636G075	MOS IC
	IC7007	TC74HC08AF	MOS IC
	IC7008	M51957BFP	LINEAR IC
	IC7009	MN1382R	MOS IC
	IC7010	M62393FP	MOS IC
	IC7011	M62393FP	MOS IC
	IC7012	LB1831M	LINEAR IC
	IC7013	AN78L15M	LINEAR IC
	IC7014	AN79L05M	LINEAR IC
	IC7015	M62393FP	MOS IC
	IC7016	M62393FP	MOS IC
	IC7017	AN78L05M	LINEAR IC
	IC7501	24LC21T-I/SN	MOS IC
	IC7502	24LC21T-I/SN	MOS IC
	IC7503	BA7657F	LINEAR IC
	IC7504	NJM2229M	LINEAR IC
	IC7505	AD8073JR	I.C
	IC7601	MC14052BF	MOS IC
	IC7602	M51132L	LINEAR IC
	IC7603	BA15218F	LINEAR IC
	IC7701	TWM700016010	MOS IC
	IC7702	MN1382R	MOS IC
	IC7703	TWM700015010	MOS IC
	IC7704	UPD4721GS	MOS IC
	IC7801	AN7147N	LINEAR IC
	IC9201	STRS6707F953	LINEAR IC
	IC9202	FA5331M	LINEAR IC
	IC9203	AN78M20	LINEAR IC
	IC9205	SE005NLF-4	HYBRID IC
	IC9301	SE012NLF4	HYBRID IC
	IC9302	UPC24M05AHF	LINEAR IC
	IC9304	AN78N05	LINEAR IC
	IC9305	STR9005F308A	LINEAR IC
	IC9306	SI-3120CA	HYBRID IC
	IC9307	SI-3050CA	HYBRID IC
	IC9308	SI-3120CA	HYBRID IC

TRANSISTORS

	Ref. No.	Part No.	Description
	Q1003	2SD601AQ	TRANSISTOR
	Q1004	2SD601AQ	TRANSISTOR
	Q1005	2SD601AQ	TRANSISTOR
	Q1006	2SD601AQ	TRANSISTOR
	Q1018	2SD601AQ	TRANSISTOR
	Q1019	2SD601AQ	TRANSISTOR
	Q1020	2SD601AQ	TRANSISTOR
	Q1021	2SD601AQ	TRANSISTOR
	Q1024	2SD601AQ	TRANSISTOR
	Q1025	2SD601AQ	TRANSISTOR
	Q1026	2SD601AQ	TRANSISTOR
	Q1028	2SD601AQ	TRANSISTOR
	Q1029	2SD601AQ	TRANSISTOR
	Q1030	2SD601AQ	TRANSISTOR

	Ref. No.	Part No.	Description
	Q1031	2SD601AQ	TRANSISTOR
	Q1033	2SD601AQ	TRANSISTOR
	Q1034	2SD601AQ	TRANSISTOR
	Q1035	2SD601AQ	TRANSISTOR
	Q1036	2SB709AR	TRANSISTOR
	Q1037	2SD601AQ	TRANSISTOR
	Q1043	2SD601AQ	TRANSISTOR
	Q1044	2SB709AR	TRANSISTOR
	Q1045	2SD601AQ	TRANSISTOR
	Q1046	2SD601AQ	TRANSISTOR
	Q1047	2SD601AQ	TRANSISTOR
	Q1048	2SD601AQ	TRANSISTOR
	Q1049	2SD601AQ	TRANSISTOR
	Q1050	2SD601AQ	TRANSISTOR
	Q1051	2SD601AQ	TRANSISTOR
	Q1052	2SD601AQ	TRANSISTOR
	Q1054	2SD601AQ	TRANSISTOR
	Q1055	2SD601AQ	TRANSISTOR
	Q1056	2SD601AQ	TRANSISTOR
	Q1057	2SD601AQ	TRANSISTOR
	Q1058	2SD601AQ	TRANSISTOR
	Q1059	2SD601AQ	TRANSISTOR
	Q1060	2SD601AQ	TRANSISTOR
	Q1061	2SD601AQ	TRANSISTOR
	Q1062	2SD601AQ	TRANSISTOR
	Q1063	2SD601AQ	TRANSISTOR
	Q1065	2SD601AQ	TRANSISTOR
	Q1066	2SD601AQ	TRANSISTOR
	Q1067	2SD601AQ	TRANSISTOR
	Q1075	2SD601AQ	TRANSISTOR
	Q1076	2SD601AQ	TRANSISTOR
	Q1082	2SB709AR	TRANSISTOR
	Q1083	2SB709AR	TRANSISTOR
	Q1084	2SD601AQ	TRANSISTOR
	Q1085	2SB709AR	TRANSISTOR
	Q1086	2SB709AR	TRANSISTOR
	Q1087	2SD601AQ	TRANSISTOR
	Q1088	2SB709AR	TRANSISTOR
	Q1090	2SD601AQ	TRANSISTOR
	Q1091	2SB709AR	TRANSISTOR
	Q1092	2SD601AQ	TRANSISTOR
	Q1093	2SD601AQ	TRANSISTOR
	Q1097	2SD601AQ	TRANSISTOR
	Q1099	2SC2480S	TRANSISTOR
	Q1101	2SA1462	TRANSISTOR
	Q1102	2SB709AR	TRANSISTOR
	Q1103	2SD601AQ	TRANSISTOR
	Q1104	2SD601AQ	TRANSISTOR
	Q1105	2SD601AQ	TRANSISTOR
	Q1107	2SC2480S	TRANSISTOR
	Q1109	2SA1462	TRANSISTOR
	Q1110	2SB709AR	TRANSISTOR
	Q1111	2SD601AQ	TRANSISTOR
	Q1112	2SD601AQ	TRANSISTOR
	Q1113	2SD601AQ	TRANSISTOR
	Q1115	2SC2480S	TRANSISTOR
	Q1117	2SA1462	TRANSISTOR
	Q1118	2SB709AR	TRANSISTOR
	Q1119	2SD601AQ	TRANSISTOR
	Q1120	2SD601AQ	TRANSISTOR
	Q1122	2SD601AQ	TRANSISTOR
	Q1123	2SB709AR	TRANSISTOR
	Q1124	2SD601AQ	TRANSISTOR
	Q1126	2SD601AQ	TRANSISTOR
	Q1127	2SB709AR	TRANSISTOR
	Q1128	2SD601AQ	TRANSISTOR
	Q1130	2SD601AQ	TRANSISTOR
	Q1131	2SB709AR	TRANSISTOR
	Q1132	2SD601AQ	TRANSISTOR

	Ref. No.	Part No.	Description
	Q1133	2SB709AR	TRANSISTOR
	Q1134	2SD601AQ	TRANSISTOR
	Q1135	2SD601AQ	TRANSISTOR
	Q1136	2SB709AR	TRANSISTOR
	Q1137	2SB709AR	TRANSISTOR
	Q1138	2SB709AR	TRANSISTOR
	Q1139	2SD601AQ	TRANSISTOR
	Q1140	2SD601AQ	TRANSISTOR
	Q1141	2SD601AQ	TRANSISTOR
	Q1143	2SD601AQ	TRANSISTOR
	Q1149	2SD601AQ	TRANSISTOR
	Q1181	2SB709AR	TRANSISTOR
	Q1182	2SD601AQ	TRANSISTOR
	Q1183	2SD601AQ	TRANSISTOR
	Q1184	2SD601AQ	TRANSISTOR
	Q1185	2SD601AQ	TRANSISTOR
	Q2001	2SB709AR	TRANSISTOR
	Q2002	2SB709AR	TRANSISTOR
	Q2003	2SD601AQ	TRANSISTOR
	Q2004	2SD601AQ	TRANSISTOR
	Q2005	2SB709AR	TRANSISTOR
	Q2006	2SD601AQ	TRANSISTOR
	Q2007	2SD601AQ	TRANSISTOR
	Q2008	2SB709AR	TRANSISTOR
	Q2009	2SD601AQ	TRANSISTOR
	Q2010	2SB709AR	TRANSISTOR
	Q2011	2SD601AQ	TRANSISTOR
	Q2012	2SD601AQ	TRANSISTOR
	Q2013	2SD601AQ	TRANSISTOR
	Q2014	2SD601AQ	TRANSISTOR
	Q2015	2SB709AR	TRANSISTOR
	Q2016	2SD601AQ	TRANSISTOR
	Q2017	2SB709AR	TRANSISTOR
	Q2018	2SD601AQ	TRANSISTOR
	Q2019	2SB709AR	TRANSISTOR
	Q2020	2SD601AQ	TRANSISTOR
	Q2021	2SB709AR	TRANSISTOR
	Q2022	2SD601AQ	TRANSISTOR
	Q2023	2SB709AR	TRANSISTOR
	Q2024	2SD601AQ	TRANSISTOR
	Q2025	2SB709AR	TRANSISTOR
	Q2026	2SB709AR	TRANSISTOR
	Q2201	2SD601AQ	TRANSISTOR
	Q7001	2SD601AQ	TRANSISTOR
	Q7002	2SD601AQ	TRANSISTOR
	Q7003	2SD601AQ	TRANSISTOR
	Q7004	2SD601AQ	TRANSISTOR
	Q7005	2SD601AQ	TRANSISTOR
	Q7006	2SD601AQ	TRANSISTOR
	Q7007	2SD601AQ	TRANSISTOR
	Q7008	2SD601AQ	TRANSISTOR
	Q7009	2SD602A-R	TRANSISTOR
	Q7010	2SD601AQ	TRANSISTOR
	Q7011	2SD601AQ	TRANSISTOR
	Q7514	2SA1462	TRANSISTOR
	Q7515	2SA1462	TRANSISTOR
	Q7516	2SA1462	TRANSISTOR
	Q7517	2SD601AQ	TRANSISTOR
	Q7518	2SB709AR	TRANSISTOR
	Q7519	2SD601AQ	TRANSISTOR
	Q7520	2SB709AR	TRANSISTOR
	Q7521	2SD601AQ	TRANSISTOR
	Q7522	2SB709AR	TRANSISTOR
	Q7523	2SD601AQ	TRANSISTOR
	Q7524	2SD601AQ	TRANSISTOR
	Q7525	2SD601AQ	TRANSISTOR
	Q7526	2SD601AQ	TRANSISTOR
	Q7527	2SB709AR	TRANSISTOR
	Q7528	2SD601AQ	TRANSISTOR

	Ref. No.	Part No.	Description
	Q7529	2SD601AQ	TRANSISTOR
	Q7530	2SD601AQ	TRANSISTOR
	Q7531	2SD601AQ	TRANSISTOR
	Q7532	2SB709AR	TRANSISTOR
	Q7533	2SD601AQ	TRANSISTOR
	Q7534	2SD601AQ	TRANSISTOR
	Q7535	2SD601AQ	TRANSISTOR
	Q7536	2SD601AQ	TRANSISTOR
	Q7537	2SB709AR	TRANSISTOR
	Q7538	2SD601AQ	TRANSISTOR
	Q7539	2SD601AQ	TRANSISTOR
	Q7540	2SD601AQ	TRANSISTOR
	Q7541	2SD601AQ	TRANSISTOR
	Q7542	2SB709AR	TRANSISTOR
	Q7601	2SD601AQ	TRANSISTOR
	Q7602	2SD601AQ	TRANSISTOR
	Q7603	2SD601AQ	TRANSISTOR
	Q7604	2SD601AQ	TRANSISTOR
	Q7605	2SD601AQ	TRANSISTOR
	Q7606	2SB709AR	TRANSISTOR
	Q7701	2SB709AR	TRANSISTOR
	Q7702	2SD601AQ	TRANSISTOR
	Q7703	2SB709AR	TRANSISTOR
	Q7704	2SD601AQ	TRANSISTOR
	Q7705	2SD601AQ	TRANSISTOR
	Q7706	2SD601AQ	TRANSISTOR
	Q7752	2SD601AQ	TRANSISTOR
	Q7801	2SD601AQ	TRANSISTOR
	Q7802	2SD601AQ	TRANSISTOR
	Q7805	2SB709AR	TRANSISTOR
	Q7806	2SD601AQ	TRANSISTOR
	Q7902	2SD601AQ	TRANSISTOR
	Q9201	2SK1938	TRANSISTOR
	Q9202	2SK1938	TRANSISTOR
	Q9203	2SC2497A	TRANSISTOR
	Q9204	2SA1096A	TRANSISTOR
	Q9205	2SD601AR	TRANSISTOR
	Q9301	2SD601AR	TRANSISTOR
	Q9302	2SD601AR	TRANSISTOR
	Q9303	2SD601AR	TRANSISTOR
	Q9304	2SD601AR	TRANSISTOR
	Q9305	2SD601AR	TRANSISTOR

DIODES

	Ref. No.	Part No.	Description
	D1010	MA152K	DIODE
	D1011	MA3056M	ZENER DIODE
	D1013	MA152K	DIODE
	D1014	MA3075L	ZENER DIODE
	D1015	MA152K	DIODE
	D1016	MA3075L	ZENER DIODE
	D1017	MA3056M	ZENER DIODE
	D1019	MA152K	DIODE
	D1022	MA3033	DIODE
	D1026	MA152K	DIODE
	D1032	MA3120M	ZENER DIODE
	D1036	MA152K	DIODE
	D1037	MA28WA	DIODE
	D1038	MA28WA	DIODE
	D1039	MA28WA	DIODE
	D2001	MA3056L	DIODE
	D2002	MA3056L	DIODE
	D2003	MA3056L	DIODE
	D2004	MA152K	DIODE
	D2005	MA152K	DIODE
	D2006	MA748	DIODE
	D2007	MA748	DIODE
	D2008	MA748	DIODE
	D2009	MA153A	DIODE
	D2010	MA153A	DIODE
	D2011	MA153A	DIODE
	D7001	MA152K	DIODE
	D7002	MA152K	DIODE
	D7003	MA3120	DIODE
	D7004	MA152K	DIODE
	D7005	MA152K	DIODE
	D7006	MA152K	DIODE
	D7007	MA152K	DIODE
	D7008	MA152K	DIODE
	D7009	MA152WA	DIODE
	D7501	MA153A	DIODE
	D7502	MA153A	DIODE
	D7503	MA153A	DIODE
	D7504	MA3150M	DIODE
	D7505	MA3150M	DIODE
	D7506	MA3150M	DIODE
	D7507	MA3150M	DIODE
	D7508	MA3056M	ZENER DIODE
	D7509	MA3056M	ZENER DIODE
	D7510	MA153A	DIODE
	D7511	MA153A	DIODE
	D7512	MA153A	DIODE
	D7513	MA3150M	DIODE
	D7514	MA3150M	DIODE
	D7515	MA3150M	DIODE
	D7516	MA3150M	DIODE
	D7517	MA3056M	ZENER DIODE
	D7518	MA3056M	ZENER DIODE
	D7519	MA3056M	ZENER DIODE
	D7520	MA3056M	ZENER DIODE
	D7521	MA152K	DIODE
	D7522	MA152K	DIODE
	D7523	MA152K	DIODE
	D7524	MA704A	DIODE
	D7525	MA3056M	ZENER DIODE
	D7526	MA152K	DIODE
	D7527	MA152K	DIODE
	D7528	MA152K	DIODE
	D7529	MA704A	DIODE
	D7530	MA3056M	ZENER DIODE
	D7531	MA152K	DIODE
	D7532	MA152K	DIODE
	D7533	MA152K	DIODE
	D7534	MA704A	DIODE
	D7535	MA3056M	ZENER DIODE
	D7536	MA152K	DIODE
	D7537	MA152K	DIODE
	D7538	MA152K	DIODE
	D7539	MA704A	DIODE
	D7540	MA3056M	ZENER DIODE
	D7541	MA3100H	ZENER DIODE
	D7542	MA153A	DIODE
	D7543	MA153A	DIODE
	D7544	MA153A	DIODE
	D7545	MA3056M	ZENER DIODE
	D7546	MA3056M	ZENER DIODE
	D7547	MA152K	DIODE
	D7548	MA152K	DIODE
	D7549	MA152K	DIODE
	D7550	MA152K	DIODE
	D7601	MA3100H	ZENER DIODE
	D7602	MA3100H	ZENER DIODE
	D7603	MA3100H	ZENER DIODE
	D7604	MA3100H	ZENER DIODE
	D7605	MA3100H	ZENER DIODE

	Ref. No.	Part No.	Description
	D7606	MA3100H	ZENER DIODE
	D7607	MA3051M	ZENER DIODE
	D7701	MA152WK	DIODE
	D7702	MA152WK	DIODE
	D7703	MA152WK	DIODE
	D7704	MA3150M	DIODE
	D7705	MA3150M	DIODE
	D7706	MA3150M	DIODE
	D7707	MA3150M	DIODE
	D7708	MA3068M	ZENER DIODE
	D7709	MA3068M	ZENER DIODE
	D7710	MA3150M	DIODE
	D7711	MA3150M	DIODE
	D7712	MA3068M	ZENER DIODE
	D7713	MA3068M	ZENER DIODE
	D7714	MA3068M	ZENER DIODE
	D7715	MA3068M	ZENER DIODE
	D7716	MA3150M	DIODE
	D7717	MA3150M	DIODE
	D7718	MA3068M	ZENER DIODE
	D7719	MA3068M	ZENER DIODE
	D7720	MA3068M	ZENER DIODE
	D7801	MA152K	DIODE
	D7901	MA152K	DIODE
	D7902	SEL1110R	LED (RED)
	D7903	SEL1110R	LED (RED)
	D7904	LN11WP38	LED
	D7905	MA152K	DIODE
⚠	D9101	ERZV14D471	VARISTOR
⚠	D9201	RBV-1306H	DIODE
⚠	D9202	ERZV14D471	VARISTOR
	D9203	D8L60	DIODE
	D9204	EG01	DIODE
	D9205	EG01	DIODE
	D9206	EG01	DIODE
	D9207	EG01	DIODE
	D9209	EG01	DIODE
	D9210	EU2	DIODE
	D9211	MA723	DIODE
	D9212	MA165	DIODE
	D9213	MA4270M	ZENER DIODE
	D9214	EU2	DIODE
	D9215	AM01Z	DIODE
	D9216	AM01Z	DIODE
	D9217	RH3F	DIODE
	D9218	AM01Z	DIODE
	D9219	AM01Z	DIODE
	D9220	EU2	DIODE
	D9221	MA2160	ZENER DIODE
⚠	D9222	TLP721FD4GR	PHOTO COUPLER
⚠	D9223	TLP721FD4GR	PHOTO COUPLER
⚠	D9224	TLP721FD4GR	PHOTO COUPLER
⚠	D9225	TLP721FD4GR	PHOTO COUPLER
	D9226	EU2	DIODE
	D9227	MA165	DIODE
	D9301	D4L20UA	DIODE
	D9302	D4L20UA	DIODE
	D9303	S2L20U	DIODE
	D9304	D1NL20U	DIODE
	D9305	S3L20U	DIODE
	D9306	MA152K	DIODE
	D9307	EG01	DIODE
	D9308	MA29WB	DIODE
	D9310	MA152K	DIODE
	D9311	MA152K	DIODE
	D9312	MA5056	ZENER DIODE
	D9313	MA5056	ZENER DIODE
	D9314	MA5056	ZENER DIODE
	D9315	MA5130	ZENER DIODE

	Ref. No.	Part No.	Description
	D9316	MA5150	ZENER DIODE
	D9317	MA5200	ZENER DIODE
		COILS	
	DL1002	ELB4N058B	LC FILTER
	L1001	TLT150J991K	PEAKING COIL 15U
	L1002	ELEIE680KA	PEAKING COIL
	L1003	ELEIE680KA	PEAKING COIL
	L1004	ELEIE680KA	PEAKING COIL
	L1005	TLT100J991K	PEAKING COIL 10U
	L1006	ELEIE470KA	PEAKING COIL
	L1008	TLT270K991K	PEAKING COIL 27U
	L1009	TLT220K991K	PEAKING COIL 22U
	L1011	TLT150J991K	PEAKING COIL 15U
	L1012	TLT150J991K	PEAKING COIL 15U
	L1013	TLT047J991K	PEAKING COIL 4.7
	L1015	TLT100J991K	PEAKING COIL 10U
	L1017	TLT331K991K	PEAKING COIL 330U
	L2001	ELJFA220KB	CHIP COIL
	L2002	ELJFA220KB	CHIP COIL
	L2003	ELJFA220KB	CHIP COIL
	L2004	ELJFA220KB	CHIP COIL
	L2205	TSKA108	CHOKE COIL
	L2206	TSKA108	CHOKE COIL
	L2207	TSKA108	CHOKE COIL
	L2208	TSKA108	CHOKE COIL
	L2209	TSKA108	CHOKE COIL
	L2210	TSKA108	CHOKE COIL
	L2211	TSKA108	CHOKE COIL
	L2212	TSKA108	CHOKE COIL
	L2213	TSKA108	CHOKE COIL
	L2214	TSKA108	CHOKE COIL
	L2215	TSKA108	CHOKE COIL
	L7501	EXCCL3225U1	EMI FILTER
	L7502	EXCCL3225U1	EMI FILTER
	L7503	EXCCL3225U1	EMI FILTER
	L7504	EXCCL3225U1	EMI FILTER
	L7505	EXCCL3225U1	EMI FILTER
	L7506	EXCCL3225U1	EMI FILTER
	L7507	EXCCL3225U1	EMI FILTER
	L7508	EXCCL3225U1	EMI FILTER
	L7509	EXCCL3225U1	EMI FILTER
	L7801	TLT022K991K	PEAKING COIL 2.2U
⚠	L9102	TLPD002	LINE FILTER
⚠	L9201	TLPD002	LINE FILTER
	L9202	EXCELDR35C	CORE
	L9203	EXCELDR35C	CORE
	L9204	EXCELDR35C	CORE
	L9205	EXCELDR35C	CORE
	L9306	EXCELDR35C	CORE
	L9308	EXCELDR35C	CORE
	L9309	EXCELDR35C	CORE
	L9310	EXCELDR35C	CORE
	L9311	EXCELDR35C	CORE
	L9312	EXCELDR35C	CORE
	L9313	EXCELDR35C	CORE
	LC1000	EIL7EN008Q	COIL
	LC1001	ELB4K131B	FILTER
	LC1002	ELB4B096B	LC FILTER
	LC2201	EXCCET103U	EMI FILTER
	LC2202	EXCCET103U	EMI FILTER
	LC2203	EXCCET103U	EMI FILTER
	LC2204	EXCCET103U	EMI FILTER
	LC2205	EXCCET103U	EMI FILTER
	LC2210	TAX10089	NOISE FILTER

	Ref. No.	Part No.	Description
	LC2211	TAX10089	NOISE FILTER
	LC2212	TAX10089	NOISE FILTER
	LC2213	TAX10089	NOISE FILTER
	LC2214	TAX10089	NOISE FILTER
	LC2215	TAX10089	NOISE FILTER
	LC2216	TAX10089	NOISE FILTER
	LC2217	TAX10089	NOISE FILTER
	LC2218	TAX10089	NOISE FILTER
	LC2219	TAX10089	NOISE FILTER
	LC2220	TAX10089	NOISE FILTER
	LC2221	TAX10089	NOISE FILTER
	LC2222	TAX10089	NOISE FILTER
	LC2223	TAX10089	NOISE FILTER
	LC2224	TAX10089	NOISE FILTER
	LC2225	TAX10089	NOISE FILTER
	LC2226	TAX10089	NOISE FILTER
	LC2227	TAX10089	NOISE FILTER
	LC2228	TAX10089	NOISE FILTER
	LC2229	TAX10089	NOISE FILTER
	LC2230	TAX10089	NOISE FILTER
	LC2231	TAX10089	NOISE FILTER
	LC2232	TAX10089	NOISE FILTER
	LC2233	TAX10089	NOISE FILTER
	LC2234	TAX10089	NOISE FILTER
	LC2235	TAX10089	NOISE FILTER
	LC2236	TAX10089	NOISE FILTER
	LC7001	EXCCET103U	EMI FILTER
	LC7002	EXCCET103U	EMI FILTER
	LC7003	EXCCET103U	EMI FILTER
	LC7004	EXCCET103U	EMI FILTER
	LC7005	EXCCET103U	EMI FILTER
	LC7006	EXCCET103U	EMI FILTER
	LC7007	EXCCET103U	EMI FILTER
	LC7008	EXCCET103U	EMI FILTER
	LC7501	TAC52101T50V	C 100PF, 50V
	LC7502	TAC52101T50V	C 100PF, 50V
	LC7701	TAC52101T50V	C 100PF, 50V
	LC7702	TAC52101T50V	C 100PF, 50V
	LC7703	TAC52101T50V	C 100PF, 50V
	LC7704	TAC52101T50V	C 100PF, 50V
		TRANSFORMERS	
⚠	T9201	TLPF068-3	CHOKE TRANS
⚠	T9301	ETS29AK1U6AC	SWITCHING TRANS
		RESISTORS	
	R1000	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1001	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1003	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1004	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1005	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1010	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1011	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1012	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1013	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1014	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1016	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1037	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R1038	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1039	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1040	ERJ6GEYJ183	M 18KOHM, J, 1/10W

	Ref. No.	Part No.	Description
	R1041	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1042	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1043	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1044	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1045	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1046	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1047	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R1048	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R1049	ERJ6GEYJ273	M 27KOHM, J, 1/10W
	R1051	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1052	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1053	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1054	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1055	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1056	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1057	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1058	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1059	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1060	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1061	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1063	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1064	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1065	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1068	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1070	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1071	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1072	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1073	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1074	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1075	ERJ6ENF6800	M 680 OHM, 1/10W
	R1076	ERJ6ENF4700	M 470 OHM, 1/10W
	R1077	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1078	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1081	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1082	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1083	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1084	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1085	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1086	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1087	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R1088	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1089	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1090	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1091	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1093	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W
	R1094	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1095	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1096	ERJ6GEYJ273	M 27KOHM, J, 1/10W
	R1097	ERJ6GEYJ272	M 2.7KOHM, J, 1/10W
	R1098	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1099	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1100	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1101	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1102	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1103	ERJ6GEYJ201	M 200 OHM, J, 1/10W
	R1104	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1105	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W
	R1106	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1107	ERJ6GEYJ201	M 200 OHM, J, 1/10W
	R1108	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1109	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1110	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1111	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1112	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1113	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1114	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1117	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1118	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1119	ERJ6GEYJ103	M 10KOHM, J, 1/10W

	Ref. No.	Part No.	Description
	R1120	ERJ6GEYJ122	M 1.2KOHM, J, 1/10W
	R1125	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W
	R1126	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1127	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1128	ERJ6GEYJ272	M 2.7KOHM, J, 1/10W
	R1129	ERJ6ENF8200	M 820 OHM, 1/10W
	R1130	ERJ6ENF5601	M 5.6KOHM, 1/10W
	R1131	ERJ6ENF1001	M 1KOHM, 1/10W
	R1132	ERJ6ENF5600	M 560 OHM, 1/10W
	R1133	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1134	ERJ6ENF8200	M 820 OHM, 1/10W
	R1135	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1136	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1156	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1157	ERJ6GEYJ153	M 15KOHM, J, 1/10W
	R1158	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1159	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1160	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1161	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1162	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1163	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1164	ERJ6ENF3600	M 360OHM, 1/10W
	R1165	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1166	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1167	ERJ6ENF1001	M 1KOHM, 1/10W
	R1168	ERJ6ENF4700	M 470 OHM, 1/10W
	R1169	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1170	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1171	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1172	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1173	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1174	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1175	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1177	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1179	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1180	ERJ6GEYJ822	M 8.2KOHM, J, 1/10W
	R1181	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1182	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1183	ERJ6GEYJ272	M 2.7KOHM, J, 1/10W
	R1184	ERJ6GEYJ393	M 39KOHM, J, 1/10W
	R1185	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1186	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1187	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1188	ERJ6GEYJ822	M 8.2KOHM, J, 1/10W
	R1189	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1190	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1191	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1192	ERJ6ENF5600	M 560 OHM, 1/10W
	R1193	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1194	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1195	ERJ6ENF1201	M 1.2KOHM, 1/10W
	R1196	ERJ6ENF4700	M 470 OHM, 1/10W
	R1197	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1198	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1201	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1202	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1203	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1204	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1205	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1206	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1207	ERJ6ENF1001	M 1KOHM, 1/10W
	R1208	ERJ6ENF8200	M 820 OHM, 1/10W
	R1210	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1211	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1212	ERJ6GEYJ122	M 1.2KOHM, J, 1/10W
	R1219	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1220	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1221	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1222	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1223	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1224	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1228	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1229	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1231	ERJ6GEYJ683	M 68KOHM, J, 1/10W
	R1232	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1233	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1234	ERJ6ENF3300	M 330 OHM, 1/10W
	R1235	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1236	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1237	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1238	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R1239	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1240	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1242	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1243	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1244	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1245	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1246	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1247	ERJ6GEYJ224	M 220KOHM, J, 1/10W
	R1248	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1253	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1254	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1255	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1256	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1257	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1258	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R1259	ERJ6GEYJ391	M 390 OHM, J, 1/10W
	R1260	ERJ6GEYJ274	M 270KOHM, J, 1/10W
	R1261	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1262	ERJ6GEYJ153	M 15KOHM, J, 1/10W
	R1263	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1264	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1265	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1266	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1267	ERJ6GEYJ822	M 8.2KOHM, J, 1/10W
	R1268	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1269	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1270	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1272	ERJ6GEYJ362	M 3.6KOHM, J, 1/10W
	R1273	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1274	ERJ6GEYJ392	M 3.9KOHM, J, 1/10W
	R1275	ERJ6GEYJ153	M 15KOHM, J, 1/10W
	R1276	ERJ6GEYJ475	M 4.7MOHM, J, 1/10W
	R1277	ERJ6GEYJ475	M 4.7MOHM, J, 1/10W
	R1278	ERJ6GEYJ242	M 2.4KOHM, J, 1/10W
	R1279	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1281	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1283	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1285	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1286	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1287	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1288	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1289	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R1290	ERJ6GEYJ683	M 68KOHM, J, 1/10W
	R1291	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1292	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1293	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R1295	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1296	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1297	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1298	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W
	R1299	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1300	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1314	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1315	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1316	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1323	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1324	ERJ6GEYJ331	M 330 OHM, J, 1/10W

	Ref. No.	Part No.	Description
	R1325	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1326	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1327	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1334	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1335	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1336	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1337	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1338	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1340	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1342	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1343	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1344	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1345	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1346	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1347	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R1348	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1350	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1351	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1352	ERJ6GEYJ392	M 3.9KOHM, J, 1/10W
	R1353	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1354	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1359	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1360	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R1368	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R1371	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1372	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1373	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1375	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1378	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1380	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1387	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1388	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1389	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1390	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1391	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1392	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1393	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1394	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1399	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1400	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1401	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1402	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1403	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1404	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1405	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1427	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1444	ERJ6GEYJ391	M 390 OHM, J, 1/10W
	R1445	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1446	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1447	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1452	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1453	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1462	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1463	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1464	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1465	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1466	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1467	ERJ6GEYJ820	M 82 OHM, J, 1/10W
	R1468	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1469	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1470	ERJ6GEYJ330	M 33 OHM, J, 1/10W
	R1471	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1472	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1473	ERJ6GEYJ391	M 390 OHM, J, 1/10W
	R1474	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1475	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1476	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1481	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1482	ERJ6GEYJ561	M 560 OHM, J, 1/10W

	Ref. No.	Part No.	Description
	R1491	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1492	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1493	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1494	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1495	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1496	ERJ6GEYJ820	M 82 OHM, J, 1/10W
	R1497	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1498	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1499	ERJ6GEYJ330	M 33 OHM, J, 1/10W
	R1500	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1501	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1502	ERJ6GEYJ391	M 390 OHM, J, 1/10W
	R1503	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1504	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1505	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R1510	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1511	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1520	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1521	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1522	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1523	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1524	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R1525	ERJ6GEYJ820	M 82 OHM, J, 1/10W
	R1526	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R1527	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1528	ERJ6GEYJ330	M 33 OHM, J, 1/10W
	R1529	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1530	ERJ6GEYJ681	M 680 OHM, J, 1/10W
	R1533	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1534	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1535	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1536	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1537	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R1538	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1541	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1542	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1543	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1544	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1545	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R1546	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1549	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1550	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1551	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1552	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1553	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R1554	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1555	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1556	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1557	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1562	ERJ6ENF5600	M 560 OHM, 1/10W
	R1563	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R1564	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1566	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1567	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1569	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1571	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1572	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1574	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1576	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R1577	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R1580	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R1581	EVM38GA00B22	CONTROL 200 OHMB
	R1583	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1584	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1585	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1586	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1587	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1588	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1589	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W

	Ref. No.	Part No.	Description
	R1594	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W
	R1596	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1597	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R1600	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R1606	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R1607	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R1630	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1641	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1643	ERJ6GEYJ821	M 820 OHM, J, 1/10W
	R1650	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R1651	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R1652	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R1653	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1655	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1657	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R1659	ERJ6GEYJ123	M 12KOHM, J, 1/10W
	R1660	ERJ6GEYJ392	M 3.9KOHM, J, 1/10W
	R1661	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1662	ERJ6ENF1201	M 1.2KOHM, 1/10W
	R1663	ERJ6ENF8200	M 820 OHM, 1/10W
	R1664	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1665	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R1666	ERJ6ENF1001	M 1KOHM, 1/10W
	R1667	ERJ6ENF1001	M 1KOHM, 1/10W
	R1668	ERJ6ENF1501	M 1.5KOHM, 1/10W
	R1669	ERJ6ENF1201	M 1.2KOHM, 1/10W
	R1670	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R1671	ERJ6GEYJ271	M 270 OHM, J, 1/10W
	R1672	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2001	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R2002	EVM38GA00B14	CONTROL 100KOHMB
	R2003	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2004	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2005	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2006	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2010	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R2011	EVM38GA00B14	CONTROL 100KOHMB
	R2012	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2013	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2014	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2015	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2019	ERJ6GEYJ223	M 22KOHM, J, 1/10W
	R2020	EVM38GA00B14	CONTROL 100KOHMB
	R2021	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2022	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2023	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2024	ERJ6GEYJ104	M 100KOHM, J, 1/10W
	R2028	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2029	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R2030	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2031	ERJ6GEYJ510	M 51 OHM, 1/10W
	R2032	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2033	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2034	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2035	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2036	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2037	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2038	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2039	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2040	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R2042	ERJ6GEYJ153	M 15KOHM, J, 1/10W
	R2043	ERJ6GEYJ153	M 15KOHM, J, 1/10W
	R2045	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R2046	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2047	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2048	ERJ6GEYJ513	M 51KOHM, J, 1/10W
	R2049	ERJ6GEYJ513	M 51KOHM, J, 1/10W
	R2050	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2052	ERJ6GEYJ123	M 12KOHM, J, 1/10W

	Ref. No.	Part No.	Description
	R2053	ERJ6GEYJ912	M 9.1KOHM, J, 1/10W
	R2055	ERJ6GEYJ132	M 1.3KOHM, J, 1/10W
	R2056	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2057	ERJ6GEYJ513	M 51KOHM, J, 1/10W
	R2058	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2059	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2060	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2061	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2062	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2063	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2066	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2067	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2068	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2069	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2070	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2078	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2080	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2081	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2082	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2084	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2085	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2086	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2087	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2088	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2089	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2090	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R2091	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2092	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2093	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2094	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R2095	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2096	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2097	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2114	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2115	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R2116	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2117	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2118	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R2119	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2120	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2121	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2122	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2123	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2124	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2125	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2126	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2127	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R2128	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2129	ERJ6GEYJ2R2	M 2.2 OHM, J, 1/10W
	R2130	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R2131	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2132	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2133	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2134	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2135	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R2136	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2139	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2140	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2141	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2142	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2143	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2144	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2146	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2147	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2150	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2151	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2152	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2153	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2154	ERJ6GEYJ560	M 56 OHM, J, 1/10W

	Ref. No.	Part No.	Description
	R2155	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2156	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2157	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2158	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2159	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2160	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2161	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2162	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2163	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2164	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2165	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2166	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2167	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2168	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2169	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2171	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2172	ERJ6GEYJ470	M 47 OHM, J, 1/10W
	R2173	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2174	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2175	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2176	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2177	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2178	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R2180	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2181	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R2182	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2201	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2202	ERJ6GEYJ134	M 130KOHM, J, 1/10W
	R2203	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2204	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2205	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R2206	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R2207	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2208	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2209	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2210	ERJ6GEYJ471	M 470 OHM, J, 1/10W
	R2211	ERJ6GEYJ622	M 6.2KOHM, 1/10W
	R2212	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R2214	ERJ6GEYJ272	M 2.7KOHM, J, 1/10W
	R2215	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
	R2216	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2217	ERJ6GEYJ134	M 130KOHM, J, 1/10W
	R2218	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R2219	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R2220	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2221	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2222	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2223	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2224	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2225	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2226	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2227	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2228	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2229	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2230	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2231	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2232	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2233	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2234	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2235	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2236	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2237	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2238	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2239	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2240	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2241	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2242	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2243	ERJ6GEYJ151	M 150 OHM, J, 1/10W
	R2244	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2245	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2246	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2247	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2248	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2249	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2250	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2251	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2252	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2253	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2254	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2255	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2256	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2257	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2258	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2259	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2260	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2261	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2262	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2263	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2264	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2265	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2266	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2267	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2268	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2269	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2270	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2271	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2272	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2273	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2274	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2275	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2276	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2277	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2278	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2279	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2280	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2281	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2282	ERJ6GEYJ220	M 22 OHM, J, 1/10W
	R2283	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R2284	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R2285	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2286	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2287	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2288	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R2289	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R2290	ERJ6GEYJ121	M 120 OHM, J, 1/10W
	R2291	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2292	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2293	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R2322	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R2323	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R2324	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R2325	ERJ6GEYJ563	M 56KOHM, J, 1/10W
	R2326	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2327	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R2329	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R2330	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R2338	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R2341	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R2342	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R7001	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7002	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7003	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7004	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7005	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7006	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7007	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7008	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7009	ERJ6GEYJ103	M 10KOHM, J, 1/10W

	Ref. No.	Part No.	Description
	R7010	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7011	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7012	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7013	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7014	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7015	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7016	ERJ6GEYF222	M 2.2KOHM, 1/10W
	R7017	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7018	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7019	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7020	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7021	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7022	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7023	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7025	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R7026	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R7028	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R7029	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7030	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7031	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7032	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7033	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7034	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7035	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7037	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7038	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7039	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7040	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7041	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7042	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7043	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7045	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7046	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7047	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7048	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7049	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7051	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7052	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7053	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7054	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7055	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7056	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7057	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7058	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R7059	ERJ6GEY0R00	M 0 OHM, J, 1/10W
	R7060	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7061	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7062	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7063	ERJ6GEYJ561	M 560 OHM, J, 1/10W
	R7064	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7065	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7066	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7068	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7069	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7070	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7071	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7072	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7073	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7074	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7075	ERJ6GEYJ183	M 18KOHM, J, 1/10W
	R7076	ERJ6GEYJ822	M 8.2KOHM, J, 1/10W
	R7077	ERJ6GEYJ272	M 2.7KOHM, J, 1/10W
	R7078	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7080	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7081	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R7082	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R7083	ERJ6GEYJ560	M 56 OHM, J, 1/10W
	R7084	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
	R7085	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7086	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7087	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7088	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7089	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7090	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7091	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7092	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7093	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7094	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7095	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7096	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7097	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R7098	ERJ6GEYJ474	M 470KOHM, J, 1/10W
	R7103	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7104	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7105	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7106	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7107	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7108	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7109	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7110	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7111	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7112	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7113	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7114	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7115	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R7116	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R7117	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7118	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7119	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7120	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7121	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7122	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7123	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7124	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7125	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7126	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7129	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7130	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7131	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7132	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7133	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7134	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7135	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7136	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7137	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7138	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7139	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7140	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7141	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7142	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7143	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7144	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7145	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7146	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7147	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7148	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7149	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7150	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7151	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7152	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7153	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7154	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7155	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7156	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7157	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7158	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7159	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7160	ERJ6GEYJ101	M 100 OHM, J, 1/10W

Ref. No.	Part No.	Description
R7161	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7162	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7180	ERJ6GEYJ474	M 470KOHM, J, 1/10W
R7501	ERJ6ENF75R0	M 75 OHM, 1/10W
R7502	ERJ6ENF75R0	M 75 OHM, 1/10W
R7503	ERJ6ENF75R0	M 75 OHM, 1/10W
R7507	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7508	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7509	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7510	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7511	ERJ6GEYJ125	M 1.2KOHM, J, 1/10W
R7512	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
R7513	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7514	ERJ6GEYJ221	M 220 OHM, J, 1/10W
R7515	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
R7516	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7517	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7518	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7519	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7520	ERJ6GEYJ560	M 56 OHM, J, 1/10W
R7521	ERJ6GEYJ125	M 1.2KOHM, J, 1/10W
R7522	ERJ6GEYJ273	M 27KOHM, J, 1/10W
R7523	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7524	ERJ6GEYJ471	M 470 OHM, J, 1/10W
R7525	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
R7526	ERJ6GEYJ153	M 15KOHM, J, 1/10W
R7527	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
R7528	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7529	ERJ6GEYJ473	M 47KOHM, J, 1/10W
R7530	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7531	ERJ6ENF75R0	M 75 OHM, 1/10W
R7532	ERJ6ENF75R0	M 75 OHM, 1/10W
R7533	ERJ6ENF75R0	M 75 OHM, 1/10W
R7534	ERJ6ENF75R0	M 75 OHM, 1/10W
R7535	ERJ6ENF75R0	M 75 OHM, 1/10W
R7539	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7540	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7541	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7542	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7543	ERJ6GEYJ125	M 1.2KOHM, J, 1/10W
R7544	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
R7545	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7546	ERJ6GEYJ221	M 220 OHM, J, 1/10W
R7547	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
R7548	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7549	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7550	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7551	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7552	ERJ6GEYJ560	M 56 OHM, J, 1/10W
R7553	ERJ6GEYJ125	M 1.2KOHM, J, 1/10W
R7554	ERJ6GEYJ273	M 27KOHM, J, 1/10W
R7555	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7556	ERJ6GEYJ473	M 47KOHM, J, 1/10W
R7557	ERJ6GEYJ331	M 330 OHM, J, 1/10W
R7558	ERJ6GEYJ821	M 820 OHM, J, 1/10W
R7559	ERJ6GEYJ680	M 68 OHM, J, 1/10W
R7560	ERJ6GEYJ680	M 68 OHM, J, 1/10W
R7561	ERJ6GEYJ821	M 820 OHM, J, 1/10W
R7562	ERJ6GEYJ821	M 820 OHM, J, 1/10W
R7563	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
R7564	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W
R7565	ERJ6GEYJ680	M 68 OHM, J, 1/10W
R7566	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7567	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7568	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7569	ERJ6GEYJ471	M 470 OHM, J, 1/10W
R7570	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
R7571	ERJ6GEYJ153	M 15KOHM, J, 1/10W
R7572	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
R7574	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7575	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7576	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7577	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7578	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7579	ERJ6GEYJ684	M 680KOHM, J, 1/10W
R7580	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7581	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7582	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7583	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7584	ERJ6GEYJ333	M 33KOHM, J, 1/10W
R7585	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7586	ERJ6GEYJ183	M 18KOHM, J, 1/10W
R7587	ERJ6GEYJ183	M 18KOHM, J, 1/10W
R7588	ERJ6GEYJ821	M 820 OHM, J, 1/10W
R7589	ERJ6GEYJ561	M 560 OHM, J, 1/10W
R7590	ERJ6GEYJ122	M 1.2KOHM, J, 1/10W
R7591	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7592	ERJ6GEYJ121	M 120 OHM, J, 1/10W
R7593	ERJ6GEYJ121	M 120 OHM, J, 1/10W
R7594	ERJ6GEYJ121	M 120 OHM, J, 1/10W
R7601	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7602	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7603	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7604	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7605	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7606	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7607	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7608	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7609	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7610	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7611	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7612	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7613	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7614	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7615	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7616	ERJ6GEYJ124	M 120KOHM, J, 1/10W
R7617	ERJ6GEYJ154	M 150KOHM, J, 1/10W
R7618	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7619	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7620	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7621	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7622	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7623	ERJ6GEYJ104	M 100KOHM, J, 1/10W
R7624	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7625	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R7626	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7627	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7630	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7631	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7632	ERJ6GEYJ473	M 47KOHM, J, 1/10W
R7633	ERJ6GEYJ473	M 47KOHM, J, 1/10W
R7634	ERJ6GEYJ471	M 470 OHM, J, 1/10W
R7635	ERJ6GEYJ471	M 470 OHM, J, 1/10W
R7638	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7639	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7640	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7641	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
R7642	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7643	ERJ6GEYJ183	M 18KOHM, J, 1/10W
R7644	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7645	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7646	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W
R7647	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R7648	ERJ6GEYJ183	M 18KOHM, J, 1/10W
R7649	ERJ6GEYJ103	M 10KOHM, J, 1/10W
R7650	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R7651	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R7652	ERJ6GEYJ223	M 22KOHM, J, 1/10W

	Ref. No.	Part No.	Description		Ref. No.	Part No.	Description
	R7653	ERJ6GEYJ153	M 15KOHM, J, 1/10W		R7819	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W
	R7655	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W		R7820	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W
	R7656	ERJ6GEYJ331	M 330 OHM, J, 1/10W		R7821	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7657	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W		R7822	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R7658	ERJ6GEYJ331	M 330 OHM, J, 1/10W		R7823	ERJ6GEYJ100	M 10 OHM, J, 1/10W
	R7701	ERJ6GEYJ104	M 100KOHM, J, 1/10W		R7824	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R7702	ERJ6GEYJ104	M 100KOHM, J, 1/10W		R7825	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W
	R7703	ERJ6GEYJ104	M 100KOHM, J, 1/10W		R7826	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7704	ERJ6GEYJ104	M 100KOHM, J, 1/10W		R7827	ERQ1CJP2R7S	F 2.7 OHM, J, 1W
	R7705	ERJ6GEYJ104	M 100KOHM, J, 1/10W		R7851	ERJ6ENF68R0	M 68 OHM, 1/10W
	R7706	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7852	ERJ6ENF68R0	M 68 OHM, 1/10W
	R7707	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7853	ERJ6ENF68R0	M 68 OHM, 1/10W
	R7708	ERJ6GEYJ102	M 1KOHM, J, 1/10W		R7854	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7709	ERJ6GEYJ331	M 330 OHM, J, 1/10W		R7855	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7710	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7856	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7711	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7857	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7712	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7858	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7713	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W		R7859	ERJ6ENF1001	M 1KOHM, 1/10W
	R7714	ERJ6GEYJ122	M 1.2KOHM, J, 1/10W		R7860	ERJ6ENF1001	M 1KOHM, 1/10W
	R7715	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7861	ERJ6ENF1001	M 1KOHM, 1/10W
	R7716	ERJ6GEYJ223	M 22KOHM, J, 1/10W		R7862	ERJ6ENF1001	M 1KOHM, 1/10W
	R7717	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7863	ERJ6ENF1001	M 1KOHM, 1/10W
	R7718	ERJ6GEYJ331	M 330 OHM, J, 1/10W		R7864	ERJ6ENF1001	M 1KOHM, 1/10W
	R7719	ERJ6GEYJ331	M 330 OHM, J, 1/10W		R7865	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7720	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7866	ERJ6GEYJ183	M 18KOHM, J, 1/10W
	R7721	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7867	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7722	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7868	ERJ6GEYJ183	M 18KOHM, J, 1/10W
	R7723	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7869	ERJ6GEYJ473	M 47KOHM, J, 1/10W
	R7724	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R7870	ERJ6GEYJ183	M 18KOHM, J, 1/10W
	R7725	ERJ6GEYJ333	M 33KOHM, J, 1/10W		R7871	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R7726	ERJ6GEYJ333	M 33KOHM, J, 1/10W		R7872	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R7727	ERJ6GEYJ222	M 2.2KOHM, J, 1/10W		R7873	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R7728	ERJ6GEYJ473	M 47KOHM, J, 1/10W		R7874	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
	R7729	ERJ6GEYJ223	M 22KOHM, J, 1/10W		R7875	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7730	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7876	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7731	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7901	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7732	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7902	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7733	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7905	ERJ6GEYJ102	M 1KOHM, J, 1/10W
	R7734	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7906	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R7735	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7907	ERJ6GEYJ331	M 330 OHM, J, 1/10W
	R7736	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7908	ERJ6GEYJ221	M 220 OHM, J, 1/10W
	R7737	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R7909	ERJ6GEYJ101	M 100 OHM, J, 1/10W
	R7738	ERJ6GEYJ101	M 100 OHM, J, 1/10W	⚠	R9101	ERC12GK474	S 470KOHM, K, 1/2W
	R7739	ERJ6GEYJ101	M 100 OHM, J, 1/10W	⚠	R9102	ERD75TAJ825	C 8.2MOHM, J, 3/4W
	R7740	ERJ6GEYJ101	M 100 OHM, J, 1/10W	⚠	R9201	ERU5TAK6R8	F 6.8 OHM, 5W
	R7741	ERJ6GEYJ101	M 100 OHM, J, 1/10W	⚠	R9202	UN11010	PROTECTOR
	R7742	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R9203	ERG2SJ151	M 150 OHM, 2W
	R7743	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R9204	ERDS1FJ820	C 82 OHM, J, 1/2W
	R7744	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R9205	ERDS1FJ150	C 15 OHM, J, 1/2W
	R7751	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R9206	ERDS1FJ820	C 82 OHM, J, 1/2W
	R7755	ERJ6GEYJ103	M 10KOHM, J, 1/10W		R9207	ERDS1FJ150	C 15 OHM, J, 1/2W
	R7756	ERJ6GEYJ223	M 22KOHM, J, 1/10W		R9208	ERDS2TJ273	C 27KOHM, J, 1/4W
	R7757	ERJ6GEYJ223	M 22KOHM, J, 1/10W		R9209	ER0S2CKF1203	M 120KOHM, F, 1/4W
	R7801	ERJ6GEYJ273	M 27KOHM, J, 1/10W		R9210	ER0S2CKF1103	M 110KOHM, F, 1/4W
	R7802	ERJ6GEYJ154	M 150KOHM, J, 1/10W		R9211	ER0S2CKF1203	M 120KOHM, F, 1/4W
	R7803	ERJ6GEYJ154	M 150KOHM, J, 1/10W		R9212	ERDS2TC0	C 0 OHM, 1/4W
	R7804	ERJ6GEYJ184	M 180KOHM, J, 1/10W		R9214	ERG2SJ221H	M 220 OHM, J, 2W
	R7805	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W		R9215	ERF5EKR10	W 0.1 OHM, 5W
	R7806	ERJ6GEYJ333	M 33KOHM, J, 1/10W		R9216	ERG3SJ473	M 47K OHM, J, 3W
	R7807	ERJ6GEYJ273	M 27KOHM, J, 1/10W		R9217	ERDS2TJ100	C 10 OHM, J, 1/4W
	R7808	ERJ6GEYJ154	M 150KOHM, J, 1/10W		R9218	ERDS2TJ472	C 4.7KOHM, J, 1/4W
	R7809	ERJ6GEYJ154	M 150KOHM, J, 1/10W		R9219	ERJ6GEYJ820	M 82 OHM, J, 1/10W
	R7810	ERJ6GEYJ184	M 180KOHM, J, 1/10W		R9220	ERJ6ENF2742	M 27.4KOHM, 1/10
	R7811	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W		R9221	ERDS2TJ100	C 10 OHM, J, 1/4W
	R7812	ERJ6GEYJ333	M 33KOHM, J, 1/10W		R9222	ERDS2TJ224	C 220KOHM, J, 1/4W
	R7814	ERJ6GEYJ473	M 47KOHM, J, 1/10W		R9223	ERDS2TJ274	C 270KOHM, J, 1/4W
	R7816	ERJ6GEYJ101	M 100 OHM, J, 1/10W		R9224	ERJ6GEYJ103	M 10KOHM, J, 1/10W
	R7817	ERJ6GEYJ562	M 5.6KOHM, J, 1/10W		R9225	ERDS2TJ332	C 3.3KOHM, J, 1/4W
	R7818	ERJ6GEYJ182	M 1.8KOHM, J, 1/10W		R9226	ER0S2CKF1801	M 1.8KOHM, F, 1/4W

Ref. No.	Part No.	Description
R9227	ERJ6GEYJ684	M 680KOHM, J, 1/10W
R9228	ER0S2CKF1203	M 120KOHM, F, 1/4W
R9229	ER0S2CKF1203	M 120KOHM, F, 1/4W
R9230	ER0S2CKF1003	M 100KOHM, F, 1/4W
R9231	ER0S2CKF3902	M 39KOHM, F, 1/4W
R9232	ERDS2TJ332	C 3.3KOHM, J, 1/4W
R9233	ER0S2CKF1101	M 1.1KOHM, F, 1/4W
R9234	ERJ6GEYJ105	M 1MOHM, J, 1/10W
R9235	ERJ6GEYJ393	M 39KOHM, J, 1/10W
R9236	ERJ6GEYJ183	M 18KOHM, J, 1/10W
R9237	ERF5EKR10	W 0.1 OHM, 5W
R9238	ERG3SJ823	M 82KOHM, J, 3W
R9239	ERDS2TJ220	C 22 OHM, J, 1/4W
R9240	ERDS2TJ102	C 1KOHM, J, 1/4W
R9241	ERDS2TJ392	C 3.9KOHM, J, 1/4W
R9242	ERG1SJ100P	M 10OHM, J, 1W
R9243	ERDS2TJ822	C 8.2KOHM, J, 1/4W
R9244	ERG3SJ104	M 100KOHM, J, 3W
R9245	ERG1FJS220D	M 22 OHM, 1W
R9246	ERD25FJ102	C 1KOHM, J, 1/4W
R9247	ERX2SJR68H	M 0.68 OHM, J, 2W
R9248	ERDS2TJ101	C 100 OHM, J, 1/4W
R9250	ER0S2CKF1203	M 120KOHM, F, 1/4W
R9251	ER0S2CKF1203	M 120KOHM, F, 1/4W
R9252	ER0S2CKF1203	M 120KOHM, F, 1/4W
R9253	ER0S2CKF4422	M 44.2KOHM, F, 1/4W
R9254	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R9255	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R9256	ER0S2CKF5601	M 5.6KOHM, F, 1/4W
R9257	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9258	ERDS2TJ100	C 10 OHM, J, 1/4W
R9301	ERDS2TJ332	C 3.3KOHM, J, 1/4W
R9302	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9303	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R9304	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9305	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9306	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9307	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R9308	ERDS2TJ221	C 220 OHM, J, 1/4W
R9309	ERDS2TJ332	C 3.3KOHM, J, 1/4W
R9310	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R9311	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R9312	ERJ6ENF1271	M 1.27KOHM, 1/10W
R9313	ERJ6GEYJ151	M 150 OHM, J, 1/10W
R9314	ERJ6ENF1651	M 1.65KOHM, 1/10W
R9315	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W
R9316	ERJ6GEYJ102	M 1KOHM, J, 1/10W
R9317	ERJ6GEYJ101	M 100 OHM, J, 1/10W
R9318	ERJ6ENF2871	M 2.87KOHM, 1/10W
R9319	ERJ6ENF1101	M 1.1KOHM, 1/10W
R9320	ERJ6ENF3001	M 3KOHM, 1/10W
R9321	ERDS2TJ562	C 5.6KOHM, J, 1/4W
R9322	ERJ6GEYJ243	M 24KOHM, J, 1/10W
R9323	ERDS2TJ823	C 82KOHM, J, 1/4W
R9324	ERJ6GEYJ473	M 47KOHM, J, 1/10W
R9325	ERG2SJ151	M 150 OHM, 2W
R9326	ERDS2TJ332	C 3.3KOHM, J, 1/4W
R9327	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R9328	ERJ6GEYJ223	M 22KOHM, J, 1/10W
R9329	ERJ6ENF2802	M 38K OHM, 1/10W
R9330	ERJ6ENF2002	M 20KOHM, 1/10W
	CAPACITORS	
C1006	ECUX1H101JCX	C 100PF, J, 50V
C1007	ECUX1H101JCX	C 100PF, J, 50V
C1009	ECUX1H103KBX	C 0.01UF, K, 50V
C1010	ECEA1HKA010	E 1UF, 50V
C1011	ECEA1HKA010	E 1UF, 50V
C1012	ECUX1H103KBX	C 0.01UF, K, 50V
C1013	ECEA1HKAR47	E 0.47UF, 50V
C1014	ECUX1H101JCX	C 100PF, J, 50V
C1015	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1016	ECUX1H102JCX	C 1000PF, J, 50V
C1017	ECUX1H102JCX	C 1000PF, J, 50V
C1018	ECUX1H101JCX	C 100PF, J, 50V
C1020	TAC16SA33MF1	ELECTROLYTIC CAPA
C1021	ECUX1H103KBX	C 0.01UF, K, 50V
C1022	ECEA1EKA470	E 47UF, 25V
C1023	ECUX1H103KBX	C 0.01UF, K, 50V
C1024	ECEA1HKA220	E 22UF, 50V
C1025	ECUX1H103KBX	C 0.01UF, K, 50V
C1026	ECEA1CKA101	E 100UF, 16V
C1027	ECUX1H103KBX	C 0.01UF, K, 50V
C1028	ECEA1AKA470	E 47UF, 10V
C1029	ECUX1H103KBX	C 0.01UF, K, 50V
C1030	ECEA1CKA101	E 100UF, 16V
C1031	ECEA1VKA470	E 47UF, 35V
C1032	ECEA1CKA101	E 100UF, 16V
C1033	ECUX1H103KBX	C 0.01UF, K, 50V
C1034	ECUX1H102JCX	C 1000PF, J, 50V
C1035	ECUX1H103KBX	C 0.01UF, K, 50V
C1036	ECEA1CKA101	E 100UF, 16V
C1037	ECUX1H103KBX	C 0.01UF, K, 50V
C1039	ECUX1H103KBX	C 0.01UF, K, 50V
C1042	ECUX1H103KBX	C 0.01UF, K, 50V
C1043	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1044	ECUX1H101JCX	C 100PF, J, 50V
C1045	TCUY1C474KBM	C 0.47UF, 16V
C1046	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1047	ECEA1CKA101	E 100UF, 16V
C1048	ECUX1H103KBX	C 0.01UF, K, 50V
C1049	ECEA1HKA010	E 1UF, 50V
C1050	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1052	ECUX1H103KBX	C 0.01UF, K, 50V
C1053	ECUX1H103KBX	C 0.01UF, K, 50V
C1054	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1055	ECEA1CKA101	E 100UF, 16V
C1056	ECEA1CKA101	E 100UF, 16V
C1057	ECUX1H104ZFX	C 0.1UF, Z, 50V
C1059	ECUX1H220JCX	C 22PF, J, 50V
C1060	ECUX1H220JCX	C 22PF, J, 50V
C1062	ECUX1H180JCX	C 18PF, J, 50V
C1063	ECUX1H180JCX	C 18PF, J, 50V
C1066	ECEA1HKA220	E 22UF, 50V
C1067	ECEA1CKA101	E 100UF, 16V
C1068	ECUX1H103KBX	C 0.01UF, K, 50V
C1071	ECEA1VKA470	E 47UF, 35V
C1072	ECEA1CKN330	E 33UF, 16V
C1073	ECEA1CKA470	E 47UF, 16V
C1074	ECUX1H103KBX	C 0.01UF, K, 50V
C1075	ECEA1VKA470	E 47UF, 35V
C1076	ECEA1CKN330	E 33UF, 16V
C1077	ECEA1CKN220	E 22UF, 16V
C1078	ECUX1H103KBX	C 0.01UF, K, 50V
C1079	ECEA1CKN330	E 33UF, 16V
C1080	ECEA1CKN330	E 33UF, 16V
C1081	ECEA1VKA470	E 47UF, 35V
C1083	ECUX1H101JCX	C 100PF, J, 50V
C1089	ECUX1H103KBX	C 0.01UF, K, 50V
C1090	ECEA1EKN4R7	E 4.7UF, 25V
C1091	ECEA1EKN4R7	E 4.7UF, 25V
C1092	ECUX1H680JCX	C 68PF, J, 50V
C1093	ECUX1H221JCX	C 220PF, J, 50V
C1094	ECUX1H221JCX	C 220PF, J, 50V

Ref. No.	Part No.	Description			
C1095	TCUY1C334KBM	C	0.33UF,		16V
C1097	ECUX1H103KBX	C	0.01UF,	K,	50V
C1098	ECEA1CKA101	E	100UF,		16V
C1100	ECUX1H103KBX	C	0.01UF,	K,	50V
C1101	ECEA1VKA470	E	47UF,		35V
C1102	ECEA1HKA2R2	E	2.2UF,		50V
C1103	ECEA1HKA010	E	1UF,		50V
C1104	ECUX1H123KBX	C	0.012UF,	K,	50V
C1105	ECEA1CKA101	E	100UF,		16V
C1106	ECUX1H103KBX	C	0.01UF,	K,	50V
C1107	ECEA1HKA100	E	10UF,		50V
C1108	ECEA1HKA0R1	E	0.1UF,		50V
C1109	ECUX1H103KBX	C	0.01UF,	K,	50V
C1110	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1111	ECEA1CKA101	E	100UF,		16V
C1112	ECUX1H103KBX	C	0.01UF,	K,	50V
C1113	ECEA1HKA0R1	E	0.1UF,		50V
C1114	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1115	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1116	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1117	ECEA1HKA010	E	1UF,		50V
C1118	ECUX1H103KBX	C	0.01UF,	K,	50V
C1119	ECEA1HKA010	E	1UF,		50V
C1120	ECEA1HKN2R2	E	2.2UF,		50V
C1121	ECUX1H820JCX	C	82PF,	J,	50V
C1122	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1123	ECUX1H560JCX	C	56PF,	J,	50V
C1124	ECEA1HKA100	E	10UF,		50V
C1125	ECUX1H224ZFX	C	2700PF,	Z,	50V
C1126	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1128	ECEA1HKA100	E	10UF,		50V
C1129	ECEA1CKA101	E	100UF,		16V
C1130	ECEA1HKA100	E	10UF,		50V
C1131	ECUX1E473KBX	C	0.047UF,	K,	25V
C1132	ECEA1HKA010	E	1UF,		50V
C1133	ECUX1H103KBX	C	0.01UF,	K,	50V
C1134	ECUX1H103KBX	C	0.01UF,	K,	50V
C1135	ECEA1VKA470	E	47UF,		35V
C1136	ECUX1H103KBX	C	0.01UF,	K,	50V
C1137	ECEA1HKA0R1	E	0.1UF,		50V
C1138	ECUX1H223KBX	C	0.022UF,	K,	50V
C1139	ECUX1H090CCX	C	9PF,		50V
C1140	ECUX1H120JCX	C	12PF,	J,	50V
C1141	ECUX1H223KBX	C	0.022UF,	K,	50V
C1142	ECUX1H102JCX	C	1000PF,	J,	50V
C1143	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1144	ECUX1H223KBX	C	0.022UF,	K,	50V
C1145	ECUX1H103KBX	C	0.01UF,	K,	50V
C1146	ECEA1VKA470	E	47UF,		35V
C1147	ECUX1H271JCX	C	270PF,	J,	50V
C1151	ECUX1H103KBX	C	0.01UF,	K,	50V
C1152	ECEA1HKA0R1	E	0.1UF,		50V
C1153	ECUX1H473ZFX	C	0.047UF,	Z,	50V
C1154	ECUX1H103KBX	C	0.01UF,	K,	50V
C1155	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1156	ECEA1VKA470	E	47UF,		35V
C1157	ECUX1E473KBX	C	0.047UF,	K,	25V
C1158	ECEA1HKA100	E	10UF,		50V
C1159	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1160	ECEA1HKNR47	E	0.47UF,		50V
C1161	ECEA1HKAR47	E	0.47UF,		50V
C1162	ECEA1HKAR47	E	0.47UF,		50V
C1163	ECEA1CKA101	E	100UF,		16V
C1164	ECUX1H103KBX	C	0.01UF,	K,	50V
C1165	ECEA1VKA470	E	47UF,		35V
C1166	ECEA1HKA0R1	E	0.1UF,		50V
C1167	ECEA1HKNR47	E	0.47UF,		50V
C1168	ECEA1HKNR47	E	0.47UF,		50V
C1169	ECUX1H103KBX	C	0.01UF,	K,	50V
C1170	ECEA1HKN2R2	E	2.2UF,		50V
C1171	ECEA1HKN2R2	E	2.2UF,		50V
C1172	ECEA1HKA100	E	10UF,		50V
C1173	ECEA1HKA2R2	E	2.2UF,		50V
C1174	ECEA1HKA2R2	E	2.2UF,		50V
C1175	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1176	ECUX1H101JCX	C	100PF,	J,	50V
C1177	ECUX1H103KBX	C	0.01UF,	K,	50V
C1178	ECUX1H121JCX	C	120PF,	J,	50V
C1179	ECUX1H101JCX	C	100PF,	J,	50V
C1180	ECUX1H103KBX	C	0.01UF,	K,	50V
C1181	ECUX1H103KBX	C	0.01UF,	K,	50V
C1182	ECUX1H103KBX	C	0.01UF,	K,	50V
C1183	ECUX1H103KBX	C	0.01UF,	K,	50V
C1184	ECUX1H103KBX	C	0.01UF,	K,	50V
C1185	ECEA1HKA220	E	22UF,		50V
C1186	ECUX1H103KBX	C	0.01UF,	K,	50V
C1187	ECUX1H103KBX	C	0.01UF,	K,	50V
C1194	ECEA1EKN220	E	22UF,		25V
C1195	ECEA1EKN220	E	22UF,		25V
C1196	ECEA1EKN220	E	22UF,		25V
C1197	ECUX1H103KBX	C	0.01UF,	K,	50V
C1198	ECEA1CKA470	E	47UF,		16V
C1199	ECUX1H103KBX	C	0.01UF,	K,	50V
C1200	ECUX1H103KBX	C	0.01UF,	K,	50V
C1201	ECUX1H103KBX	C	0.01UF,	K,	50V
C1202	ECUX1H103KBX	C	0.01UF,	K,	50V
C1203	ECEA1HKA2R2	E	2.2UF,		50V
C1205	ECUX1H101JCX	C	100PF,	J,	50V
C1206	ECUX1H101JCX	C	100PF,	J,	50V
C1207	ECEA1HKA010	E	1UF,		50V
C1208	ECUX1H103KBX	C	0.01UF,	K,	50V
C1209	ECEA1HKA010	E	1UF,		50V
C1210	ECUX1H103KBX	C	0.01UF,	K,	50V
C1211	ECEA1HKA010	E	1UF,		50V
C1212	ECUX1H103KBX	C	0.01UF,	K,	50V
C1213	ECUX1H103KBX	C	0.01UF,	K,	50V
C1218	ECEA1CKA101	E	100UF,		16V
C1219	ECUX1H103KBX	C	0.01UF,	K,	50V
C1237	ECUX1H680JCX	C	68PF,	J,	50V
C1239	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1240	ECUX1H680JCX	C	68PF,	J,	50V
C1242	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1243	ECUX1H680JCX	C	68PF,	J,	50V
C1245	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1246	ECUX1H103KBX	C	0.01UF,	K,	50V
C1247	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1248	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1249	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1250	ECEA1HKA010	E	1UF,		50V
C1251	ECUX1H472KBX	C	4700PF,	K,	50V
C1252	ECUX1H103KBX	C	0.01UF,	K,	50V
C1253	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1254	ECEA1CKN330	E	33UF,		16V
C1255	ECEA1CKN330	E	33UF,		16V
C1256	ECEA1CKN330	E	33UF,		16V
C1257	ECEA1CKN220	E	22UF,		16V
C1258	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1259	ECUX1H470JCX	C	47PF,	J,	50V
C1260	ECUX1H121JCX	C	120PF,	J,	50V
C1261	ECEA1CKN220	E	22UF,		16V
C1263	ECUX1H103KBX	C	0.01UF,	K,	50V
C1264	ECA1CM331G	E	330UF,		16V
C1265	ECUX1H102JCX	C	1000PF,	J,	50V
C1266	ECEA1CKN470	E	47UF,		16V
C1267	ECUX1H102JCX	C	1000PF,	J,	50V
C1268	ECEA1CKN470	E	47UF,		16V
C1269	ECUX1H102JCX	C	1000PF,	J,	50V
C1270	ECEA1CKN470	E	47UF,		16V

Ref. No.	Part No.	Description			
C1271	ECUX1H102JCX	C	1000PF,	J,	50V
C1272	ECEA1CKN470	E	47UF,		16V
C1273	ECUX1H102JCX	C	1000PF,	J,	50V
C1274	ECEA1CKN470	E	47UF,		16V
C1275	ECUX1H102JCX	C	1000PF,	J,	50V
C1276	ECEA1CKN470	E	47UF,		16V
C1277	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C1283	ECEA1EKN3R3	E	3.3UF,		25V
C1284	ECEA1EKN3R3	E	3.3UF,		25V
C1285	ECEA1EKN3R3	E	3.3UF,		25V
C1286	ECUX1H681JCX	C	680PF,	J,	50V
C1287	ECUX1H681JCX	C	680PF,	J,	50V
C1288	ECUX1H681JCX	C	680PF,	J,	50V
C1300	ECUX1H150JCX	C	15PF,	J,	50V
C1301	ECUX1H150JCX	C	15PF,	J,	50V
C1302	ECUX1H270JCX	C	27PF,	J,	50V
C1303	ECEA1HKN010	E	1UF,		50V
C1305	ECUX1H080CCX	C	8PF,	C,	50V
C1306	ECUX1H080CCX	C	8PF,	C,	50V
C1307	ECUX1H080CCX	C	8PF,	C,	50V
C1310	ECUX1H101JCX	C	100PF,	J,	50V
C1311	ERJ6GEYJ682	M	6.8KOHM,	J,	1/10W
C1313	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2001	ECUX1C105ZFX	C	1UF,	Z,	16V
C2002	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2003	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2004	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2005	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2006	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2007	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2008	ECUX1C105ZFX	C	1UF,	Z,	16V
C2009	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2010	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2011	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2012	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2013	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2014	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2015	ECUX1C105ZFX	C	1UF,	Z,	16V
C2016	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2017	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2018	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2019	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2020	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2021	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2022	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2023	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2024	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2025	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2026	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2027	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2030	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2031	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2032	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2033	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2034	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2035	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2036	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2037	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2038	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2039	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2042	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2043	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2044	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2045	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2046	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2047	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2048	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2049	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2050	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2053	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2054	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2055	ECEA1EKA470	E	47UF,		25V
C2056	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2057	ECUX1H470JCX	C	47PF,	J,	50V
C2058	ECUX1H470JCX	C	47PF,	J,	50V
C2059	ECUX1C105ZFX	C	1UF,	Z,	16V
C2060	ECUX1C105ZFX	C	1UF,	Z,	16V
C2061	ECUX1H102JCX	C	1000PF,	J,	50V
C2062	ECUX1H102JCX	C	1000PF,	J,	50V
C2063	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2064	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2065	ECUX1H102JCX	C	1000PF,	J,	50V
C2066	ECUX1H102JCX	C	1000PF,	J,	50V
C2067	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2068	ECUX1H102JCX	C	1000PF,	J,	50V
C2069	ECEA1EKA220	E	22UF,		25V
C2070	ECEA1EKA220	E	22UF,		25V
C2071	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2072	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2073	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2074	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2075	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2076	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2077	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2078	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2079	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2080	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2081	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2082	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2083	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2084	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2085	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2086	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2087	ECEA1CGE221	E	220UF,		16V
C2088	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2089	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2090	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2091	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2092	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2093	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2094	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2095	ECUX1C105ZFX	C	1UF,	Z,	16V
C2096	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2097	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2098	ECA1CM471	E	470UF,		16V
C2099	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2100	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2101	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2102	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2103	ECUX1H102JCX	C	1000PF,	J,	50V
C2104	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2105	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2106	ECA1CM471	E	470UF,		16V
C2107	ECUX1C105ZFX	C	1UF,	Z,	16V
C2108	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2109	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2110	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2111	ECUX1C105ZFX	C	1UF,	Z,	16V
C2112	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2113	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2114	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2115	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2116	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2117	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2118	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2119	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2120	ECUX1H104ZFX	C	0.1UF,	Z,	50V
C2121	ECUX1H104ZFX	C	0.1UF,	Z,	50V

	Ref. No.	Part No.	Description			
	C2122	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2123	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2124	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2125	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2126	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2127	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2128	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2129	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2130	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2131	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2132	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2133	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2134	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2135	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2136	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2137	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2138	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2139	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2140	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2141	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2142	ECA1EM221G	E	220UF,		25V
	C2143	ECEA1AKA221	E	220UF,		10V
	C2144	ECA1EM221G	E	220UF,		25V
	C2145	ECEA1AKA221	E	220UF,		10V
	C2146	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2148	ECA1EM221G	E	220UF,		25V
	C2149	ECA1EM221G	E	220UF,		25V
	C2150	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2151	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2152	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2153	ECA1AM471	E	470 UF,		10V
	C2154	ECA1AM471	E	470 UF,		10V
	C2155	ECA1AM471	E	470 UF,		10V
	C2156	ECEA1AGE221	E	220UF,		10V
	C2160	ECUX1H101JCX	C	100PF,	J,	50V
	C2161	ECUX1H101JCX	C	100PF,	J,	50V
	C2162	ECUX1H101JCX	C	100PF,	J,	50V
	C2163	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2164	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2165	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2166	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2167	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2168	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2169	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2170	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2171	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2201	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2202	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2203	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2204	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2205	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2206	ECUX1H680JCX	C	68PF,	J,	50V
	C2207	ECUX1H680JCX	C	68PF,	J,	50V
	C2208	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2209	TCUY1C105ZFN	C	1UF,		16V
	C2210	ECUX1H121JCX	C	120PF,	J,	50V
	C2211	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2212	TCUY1C105ZFN	C	1UF,		16V
	C2213	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2214	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2215	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2216	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2217	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2218	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2219	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2220	ECUX1H470JCX	C	47PF,	J,	50V
	C2221	ECUX1H470JCX	C	47PF,	J,	50V
	C2222	ECUX1H470JCX	C	47PF,	J,	50V
	C2223	ECHU1C223JA5	P	0.022UF,		16V
	C2224	ECHU1C223JA5	P	0.022UF,		16V
	C2225	ECHU1C223JA5	P	0.022UF,		16V
	C2226	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2227	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2228	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2229	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2230	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2231	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2232	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2233	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2234	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2235	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2236	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2237	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2241	ECUX1H470JCX	C	47PF,	J,	50V
	C2242	ECUX1H470JCX	C	47PF,	J,	50V
	C2243	ECUX1H470JCX	C	47PF,	J,	50V
	C2244	ECHU1C223JA5	P	0.022UF,		16V
	C2245	ECHU1C223JA5	P	0.022UF,		16V
	C2246	ECHU1C223JA5	P	0.022UF,		16V
	C2247	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2248	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2249	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2250	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2251	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2252	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2253	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2254	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2255	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2256	ECUX1H223ZFX	C	0.022UF,	Z,	50V
	C2257	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2258	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C2262	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2263	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2264	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2265	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2266	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2267	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2268	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2269	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2270	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2271	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2272	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2273	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2274	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2275	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2276	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2277	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2278	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2279	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2280	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2281	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2282	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2283	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2284	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2285	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2286	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2287	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2288	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2289	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2290	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2291	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2292	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2293	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2294	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2299	ECUX1H103KBX	C	0.01UF,	K,	50V
	C2304	ECUX1H330JCX	C	33PF,	J,	50V
	C2306	ECUX1H330JCX	C	33PF,	J,	50V
	C2310	ECUX1H103KBX	C	0.01UF,	K,	50V

Ref. No.	Part No.	Description
C2311	ECUX1H103KBX	C 0.01UF, K, 50V
C2312	ECUX1H103KBX	C 0.01UF, K, 50V
C2313	ECUX1H103KBX	C 0.01UF, K, 50V
C2314	ECUX1H103KBX	C 0.01UF, K, 50V
C2315	ECUX1H103KBX	C 0.01UF, K, 50V
C2316	ECUX1H103KBX	C 0.01UF, K, 50V
C2317	ECUX1H103KBX	C 0.01UF, K, 50V
C2320	ECUX1H103KBX	C 0.01UF, K, 50V
C2321	ECUX1H103KBX	C 0.01UF, K, 50V
C2322	ECUX1H103KBX	C 0.01UF, K, 50V
C2323	ECUX1H103KBX	C 0.01UF, K, 50V
C2324	ECUX1H103KBX	C 0.01UF, K, 50V
C2325	ECUX1H103KBX	C 0.01UF, K, 50V
C2326	ECUX1H103KBX	C 0.01UF, K, 50V
C2327	ECUX1H103KBX	C 0.01UF, K, 50V
C2350	ECEA1CKA101	E 100UF, 16V
C2351	ECEA1CKA101	E 100UF, 16V
C2352	ECEV1CG470GP	E 47UF, 16V
C2353	ECA1CM471	E 470UF, 16V
C2354	ECA1CM471	E 470UF, 16V
C2355	ECEV1CG470GP	E 47UF, 16V
C2356	ECEV1CG470GP	E 47UF, 16V
C2357	ECEA1CKA220	E 22UF, 16V
C2358	ECEV1CG220GP	E 22UF, 16V
C2359	ECEA1CKA470	E 47UF, 16V
C2360	ECEA1CKA101	E 100UF, 16V
C2361	ECEA1EKA4R7	E 4.7UF, 25V
C2362	ECEA1EKA4R7	E 4.7UF, 25V
C2363	ECEA1EKA4R7	E 4.7UF, 25V
C2364	ECEA1EKA4R7	E 4.7UF, 25V
C2365	ECEA1EKA4R7	E 4.7UF, 25V
C2366	ECEA1EKA4R7	E 4.7UF, 25V
C2367	ECEA1CKA470	E 47UF, 16V
C2368	ECEA1CKA101	E 100UF, 16V
C2369	ECEA1EKA4R7	E 4.7UF, 25V
C2370	ECEA1EKA4R7	E 4.7UF, 25V
C2371	ECEA1EKA4R7	E 4.7UF, 25V
C2372	ECEA1EKA4R7	E 4.7UF, 25V
C2373	ECEA1EKA4R7	E 4.7UF, 25V
C2374	ECEA1EKA4R7	E 4.7UF, 25V
C2375	ECEA1CKA470	E 47UF, 16V
C2376	ECEA1CKA470	E 47UF, 16V
C2377	ECEA1CKA470	E 47UF, 16V
C2378	ECA1CM471	E 470UF, 16V
C2379	ECA1CM471	E 470UF, 16V
C2380	ECA1CM471	E 470UF, 16V
C2381	ECA1CM471	E 470UF, 16V
C2424	ECUX1H330JCX	C 33PF, J, 50V
C2428	ECUX1H101JCX	C 100PF, J, 50V
C2440	ECUX1H330JCX	C 33PF, J, 50V
C2441	ECUX1H330JCX	C 33PF, J, 50V
C2443	ECUX1H330JCX	C 33PF, J, 50V
C2444	ECUX1H101JCX	C 100PF, J, 50V
C2445	ECUX1H330JCX	C 33PF, J, 50V
C2446	ECUX1H330JCX	C 33PF, J, 50V
C2447	ECUX1H101JCX	C 100PF, J, 50V
C2448	ECUX1H101JCX	C 100PF, J, 50V
C2449	ECUX1H101JCX	C 100PF, J, 50V
C2450	ECUX1H101JCX	C 100PF, J, 50V
C2451	ECUX1H101JCX	C 100PF, J, 50V
C2452	ECUX1H330JCX	C 33PF, J, 50V
C7001	ECUX1H101JCX	C 100PF, J, 50V
C7002	ECUX1H101JCX	C 100PF, J, 50V
C7003	ECUX1H101JCX	C 100PF, J, 50V
C7004	ECUX1H101JCX	C 100PF, J, 50V
C7005	ECUX1H102JCX	C 1000PF, J, 50V
C7006	ECUX1H102JCX	C 1000PF, J, 50V
C7007	ECUX1H101JCX	C 100PF, J, 50V
C7008	ECUX1H101JCX	C 100PF, J, 50V

Ref. No.	Part No.	Description
C7009	ECUX1H102JCX	C 1000PF, J, 50V
C7011	ECEA1EKA220	E 22UF, 25V
C7012	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7013	ECUX1H330JCX	C 33PF, J, 50V
C7014	ECUX1H330JCX	C 33PF, J, 50V
C7015	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7016	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7017	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7018	ECUX1H102JCX	C 1000PF, J, 50V
C7019	ECUX1H333ZFX	C 0.033UF, Z, 50V
C7020	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7021	ECUX1H102JCX	C 1000PF, J, 50V
C7022	ECUX1H102JCX	C 1000PF, J, 50V
C7023	ECUX1H102JCX	C 1000PF, J, 50V
C7024	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7025	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7026	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7027	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7028	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7029	ECA1CM471	E 470UF, 16V
C7030	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7031	ECEA1EKA220	E 22UF, 25V
C7032	ECEA1EKA220	E 22UF, 25V
C7033	ECUX1H102JCX	C 1000PF, J, 50V
C7034	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7035	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7036	ECEA1AGE221	E 220UF, 10V
C7037	ECA1EM221G	E 220UF, 25V
C7038	ECEA1EKA220	E 22UF, 25V
C7039	ECUX1H102JCX	C 1000PF, J, 50V
C7040	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7041	ECA1EM221G	E 220UF, 25V
C7042	ECUX1H102JCX	C 1000PF, J, 50V
C7043	ECUX1H102JCX	C 1000PF, J, 50V
C7044	ECUX1H101JCX	C 100PF, J, 50V
C7045	ECUX1H101JCX	C 100PF, J, 50V
C7046	ECUX1C105ZFX	C 1UF, Z, 16V
C7047	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7048	ECEA1EKA101	E 100UF, 25V
C7049	ECEA1EKA101	E 100UF, 25V
C7050	ECEA1AKA470	E 47UF, 10V
C7051	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7052	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7053	ECEA1AKA470	E 47UF, 10V
C7501	ECEA1CKA330	E 33UF, 16V
C7502	ECEA1CKA330	E 33UF, 16V
C7503	ECEA1CKA330	E 33UF, 16V
C7507	ECUX1H103KBX	C 0.01UF, K, 50V
C7509	ECEA1CKA330	E 33UF, 16V
C7510	ECEA1CKA330	E 33UF, 16V
C7511	ECEA1CKA330	E 33UF, 16V
C7514	ECUX1H103KBX	C 0.01UF, K, 50V
C7515	ECUX1H103KBX	C 0.01UF, K, 50V
C7516	ECUX1H104ZFX	C 0.1UF, Z, 50V
C7519	ECUX1H103KBX	C 0.01UF, K, 50V
C7520	ECEA1CKA101	E 100UF, 16V
C7521	ECEA1CKA101	E 100UF, 16V
C7522	ECUX1H103KBX	C 0.01UF, K, 50V
C7523	ECEA1AKA101	E 100UF, 10V
C7524	ECUX1H103KBX	C 0.01UF, K, 50V
C7525	ECEA1CKN100	E 10UF, 16V
C7526	ECUX1C105ZFX	C 1UF, Z, 16V
C7527	ECUX1H151JCX	C 150PF, J, 50V
C7528	ECEA1CKN100	E 10UF, 16V
C7529	ECEA1HKN3R3	E 3.3UF, 50V
C7530	ECUX1H220JCX	C 22PF, J, 50V
C7531	ECUX1H470JCX	C 47PF, J, 50V
C7532	ECEA1CKN100	E 10UF, 16V
C7533	ECUX1C105ZFX	C 1UF, Z, 16V

	Ref. No.	Part No.	Description			
	C7534	ECUX1H151JCX	C	150PF,	J,	50V
	C7535	ECEA1CKN100	E	10UF,		16V
	C7536	ECEA1HKN3R3	E	3.3UF,		50V
	C7537	ECUX1H220JCX	C	22PF,	J,	50V
	C7538	ECUX1H470JCX	C	47PF,	J,	50V
	C7539	ECEA1EKA4R7	E	4.7UF,		25V
	C7540	ECUX1H101JCX	C	100PF,	J,	50V
	C7541	ECUX1H102JCX	C	1000PF,	J,	50V
	C7542	ECEA1CKA100	E	10UF,		16V
	C7543	ECUX1H102JCX	C	1000PF,	J,	50V
	C7544	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7545	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7546	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7547	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7548	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7549	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7550	ECA1EM471	E	470UF,		25V
	C7551	ECA1EM471	E	470UF,		25V
	C7552	ECA1EM471	E	470UF,		25V
	C7553	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7554	ECEA1CKN100	E	10UF,		16V
	C7555	ECEA1CKN100	E	10UF,		16V
	C7556	ECEA1CKN100	E	10UF,		16V
	C7557	ECEA1HKNR47	E	0.47UF,		50V
	C7601	ECEA1CKA470	E	47UF,		16V
	C7602	ECEA1CKA470	E	47UF,		16V
	C7603	ECEA1CKA470	E	47UF,		16V
	C7604	ECEA1CKA470	E	47UF,		16V
	C7605	ECEA1CKA470	E	47UF,		16V
	C7606	ECEA1CKA470	E	47UF,		16V
	C7607	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7608	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7609	ECEA1HKN010	E	1UF,		50V
	C7610	ECEA1CKA220	E	22UF,		16V
	C7611	ECEA1HKA4R7	E	4.7UF,		50V
	C7612	ECEA1HKN010	E	1UF,		50V
	C7613	ECEA1CKA100	E	10UF,		16V
	C7614	ECEA1CKA100	E	10UF,		16V
	C7615	ECUX1H272KBX	C	2700PF,	K,	50V
	C7616	ECUX1H272KBX	C	2700PF,	K,	50V
	C7617	ECEA1EKA470	E	47UF,		25V
	C7618	ECEA1HKN010	E	1UF,		50V
	C7619	ECEA1HKN010	E	1UF,		50V
	C7701	ECUX1H330JCX	C	33PF,	J,	50V
	C7702	ECUX1H330JCX	C	33PF,	J,	50V
	C7703	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C7704	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7705	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C7706	ECUX1H330JCX	C	33PF,	J,	50V
	C7707	ECUX1H330JCX	C	33PF,	J,	50V
	C7708	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C7709	ECUX1C105ZFX	C	1UF,	Z,	16V
	C7710	ECUX1C105ZFX	C	1UF,	Z,	16V
	C7711	ECUX1C105ZFX	C	1UF,	Z,	16V
	C7712	ECUX1C105ZFX	C	1UF,	Z,	16V
	C7713	ECUX1H221JCX	C	220PF,	J,	50V
	C7714	ECUX1H221JCX	C	220PF,	J,	50V
	C7801	ECEA1CKA470	E	47UF,		16V
	C7802	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7803	ECEA1CKA100	E	10UF,		16V
	C7804	ECEA1CKA100	E	10UF,		16V
	C7805	ECEA1CKA101	E	100UF,		16V
	C7806	ECEA1HKN010	E	1UF,		50V
	C7807	ECUX1H102JCX	C	1000PF,	J,	50V
	C7808	ECUX1H102JCX	C	1000PF,	J,	50V
	C7809	ECEA1HKN010	E	1UF,		50V
	C7810	ECEA1CKA101	E	100UF,		16V
	C7811	ECA1CM102	E	1000UF,		16V
	C7812	ECEA1EN470U	E	47UF,		25V

	Ref. No.	Part No.	Description			
	C7813	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C7814	ECA1VM221G	E	220UF,		35V
	C7815	ECA1VM221G	E	220UF,		35V
	C7816	ECEA1EN470U	E	47UF,		25V
	C7817	ECUX1H104ZFX	C	0.1UF,	Z,	50V
	C7818	ECA1CM102	E	1000UF,		16V
	C7819	ECA1VM470	E	47UF,		35V
	C7820	ECEA1CKA100	E	10UF,		16V
	C7901	ECUX1H103KBX	C	0.01UF,	K,	50V
	C7902	TAC16SA33MF1	ELECTROLYTIC CAPACITOR			
	C7903	ECEA1CKA470	E	47UF,		16V
	C7904	ECUX1H103KBX	C	0.01UF,	K,	50V
⚠	C9101	ECQU2A224MN	P	0.22UF,	M,	250V
⚠	C9102	ECKCNS222MEJ	C	2200PF,	M,	
⚠	C9103	ECKCNS222MEJ	C	2200PF,	M,	
⚠	C9104	ECQE2A474MW	P	0.47UF,		250V
⚠	C9105	ECQE2A474MW	P	0.47UF,		250V
⚠	C9106	ECQE2A474MW	P	0.47UF,		250V
⚠	C9201	ECQU2A105MV	P	1UF,	M,	250V
⚠	C9203	ECKDNB472ME	C	4700PF,	M	
⚠	C9204	ECKDNB472ME	C	4700PF,	M	
⚠	C9205	ECKDNB472ME	C	4700PF,	M	
⚠	C9206	ECQE6225JF	P	2.2UF,	J,	630V
	C9207	ECKD3D221JBP	C	220PF,	J,	2KV
	C9208	EC0S2WB151DB	E	150UF,		450V
	C9209	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9211	ECEA1HGE221	E	220UF,		50V
	C9212	ECKD3A122KBP	C	1200PF,	K,	1KV
	C9213	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9214	ECEA1VGE331	E	330UF,		35V
	C9215	ECEA1HGE2R2	E	2.2UF,		50V
	C9216	ECUX1H121JCX	C	120PF,	J,	50V
	C9217	ECUX1H681JCX	C	680PF,	J,	50V
	C9218	ECUX1H472KBX	C	4700PF,	K,	50V
	C9219	ECUX1H471JCX	C	470PF,	J,	50V
	C9220	ECUX1H101JCX	C	100PF,	J,	50V
	C9221	ECEA1HN010U	E	1UF,		50V
	C9222	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9223	ECQB1H104JF	P	0.1UF,	J,	50V
	C9224	ECEA1VGE471	E	470UF,		35V
	C9225	ECKD3A152KBP	C	1500PF,	K,	1KV
	C9226	ECQE6153KF	P	0.015UF,	J,	630V
	C9227	ECEA1CGE221	E	220UF,		16V
	C9228	ECQB1H104JF	P	0.1UF,	J,	50V
	C9229	ECKD3D221JBP	C	220PF,	J,	2KV
⚠	C9230	ECKCNA102MBX	C	1000PF,	M,	
	C9231	ECEA1EGE221	E	220UF,		25V
	C9232	EC0S2WB151DB	E	150UF,		450V
	C9233	EC0S2WB151DB	E	150UF,		450V
	C9234	ECEA1HGE3R3	E	3.3UF,		50V
	C9301	EEUFA1C332	E	3300UF,		16V
	C9302	EEUFA1E222	E	2200UF,		25V
	C9303	EEUFA1E102	E	1000UF,		25V
	C9304	EEUFA1C102	E	1000UF,		16V
	C9305	EEUFA1V471	E	470UF,		35V
	C9307	ECEA1HGE100	E	10UF,		50V
	C9308	ECQB1H224JF	P	0.22UF,	J,	50V
	C9309	EEUFA1E222	E	2200UF,		25V
	C9310	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9311	ECEA1EGE101	E	100UF,		25V
	C9312	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9316	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9317	ECEA1EGE101	E	100UF,		25V
	C9318	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9319	ECEA1CGE101	E	100UF,		16V
	C9320	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9321	ECUX1H103KBX	C	0.01UF,	K,	50V
	C9322	ECEA1EGE221	E	220UF,		25V
	C9323	ECUX1H103KBX	C	0.01UF,	K,	50V

	Ref. No.	Part No.	Description
	C9324	ECEA1EGE221	E 220UF, 25V
	C9325	ECUX1C105ZFX	C 1UF, Z, 16V
	C9327	ECUX1H103KBX	C 0.01UF, K, 50V
	C9328	ECEA1VGE221	E 220UF, 35V
	C9329	ECUX1H103KBX	C 0.01UF, K, 50V
	C9330	ECKD3A101KBP	C 100PF, K, 1KV
	C9331	ECKD3A101KBP	C 100PF, K, 1KV
	C9332	ECKD3A101KBP	C 100PF, K, 1KV
	C9333	ECKD3A101KBP	C 100PF, K, 1KV
	C9334	ECKD3A101KBP	C 100PF, K, 1KV
	C9335	ECEA1EGE471	E 470UF, 25V
	C9336	ECEA1CGE471	E 470UF, 16V
	C9339	ECEA1CGE471	E 470UF, 16V
	C9340	ECEA1VGE471	E 470UF, 35V
		OTHERS	
	A1	TJSF21830	30P CONNECTOR
	A2	TJSF21830	30P CONNECTOR
	A3	TJSF21830	30P CONNECTOR
	A4	TJS3A9120	20P CONNECTOR
	A5	TJS3A9120	20P CONNECTOR
	A6	TJSF21730	30P CONNECTOR
	A7	TJS3A9670	6P CONNECTOR
	A8	TJS3A9660	5P CONNECTOR
	A9	TJSF21615A	15P CONNECTOR
	A10	TJS3A9920	12P CONNECTOR
	A11	TJSF21610A	10P CONNECTOR
	A12	TJS3A9640	3P CONNECTOR
	A13	TJS3A9880	8P CONNECTOR
	A14	TJS3A9640	3P CONNECTOR
	A15	TJSF21608A	8P CONNECTOR
	A16	TJS3A9640	3P CONNECTOR
	A17	TJS3A9640	3P CONNECTOR
	A18	TJS3A9640	3P CONNECTOR
	A19	TJS118590	2P CONNECTOR
	A20	TJS3A9640	3P CONNECTOR
	A21	TJS3A9650	4P CONNECTOR
	D1	TJSF21710	10P CONNECTOR
	D2	TJS3A9110	10P CONNECTOR
	D3	TJS3A9110	10P CONNECTOR
	F1	TJS3A9670	6P CONNECTOR
	F2	TJSF21614A	14P CONNECTOR
	F3	TJSF21630	30P CONNECTOR
	F8	TJSF21610A	10P CONNECTOR
	J1	TJS1A8120	6P CONNECTOR
	J2	TJSF21714	14P CONNECTOR
	J3	TJSF21715	15P CONNECTOR
	JK1001	TJC6137	EARTH LUG
	JK2201	TJC6137	EARTH LUG
	JK7000	TJC6137	EARTH LUG
	JK7001	TJC6137	EARTH LUG
	JK7501	TJSF25015	15P CONNECTOR
	JK7502	TJSF25015	15P CONNECTOR
	JK7503	TJS2A9010	TEARMINAL
	JK7504	TJBA071	JACK
	JK7505	TJS9A8061	SOCKET TERMINAL
	JK7506	TJS9A8061	SOCKET TERMINAL
	JK7507	TJSF21409	9P D-SUB
	JK7508	TJSF21513	13P SOCKET
	JK7509	TJS9A8061	SOCKET TERMINAL
	JK7510	TJSF25015	15P CONNECTOR
	JK7901	TJC6137	EARTH LUG
	JK9101	TJC6137	EARTH LUG
	JK9102	TJC6137	EARTH LUG
	JK9103	TJC6137	EARTH LUG
	JK9301	TJC6137	EARTH LUG

	Ref. No.	Part No.	Description
	JK9302	TJC6137	EARTH LUG
	K1	TJSF20702	3P CONNECTOR
	K2	TJSF20702	3P CONNECTOR
	P1	TJSF20702	3P CONNECTOR
	P2	TJSF21205	5P CONNECTOR
	P3	TJS3A9920	12P CONNECTOR
	P4	TJS118620	5P CONNECTOR
	P5	TJS118630	6P CONNECTOR
	R1	TJSF21610A	10P CONNECTOR
⚠	RL9201	TSE10821	RELAY
	RM1000	TNQ10427	REMOCON RECEIVER (REAR)
	RM7901	TNQ10483	REMOCON RECEIVER (FRONT)
	RTL	TNPA0665AC	CIRCUIT BOARD D
	RTL	TNPA0669AB	CIRCUIT BOARD P
	RTL	TNPA1104AA	CIRCUIT BOARD F
	RTL	TNPA1106AA	CIRCUIT BOARD K
	RTL	TNPA1107AA	CIRCUIT BOARD R
	RTL	TNPH0136AD	CIRCUIT BOARD A
	RTL	TNPA0673AA	CIRCUIT BOARD S
	RTL	TXN/J1VHP4	CIRCUIT BOARD J
	S1	TJS1A8100	PHONO PIN (4P)
	S2	TJSF21708	8P CONNECTOR
	S3	TJSF25306	6P CONNECTOR
	X1000	EFCA4R43MB3	CERAMIC FILTER
	X1001	TSS816N2	CRYSTAL
	X1002	TSS116M1	CRYSTAL OSCILATOR
	X1003	TAFCSB503F30	CERAMIC RESONATOR
	X2201	TAAA0018	CRYSTAL
	X7001	TSSJ012	CRYSTAL
	X7701	TAF10059	CERAMIC FILTER
	X7702	TAF10059	CERAMIC FILTER

Memo: